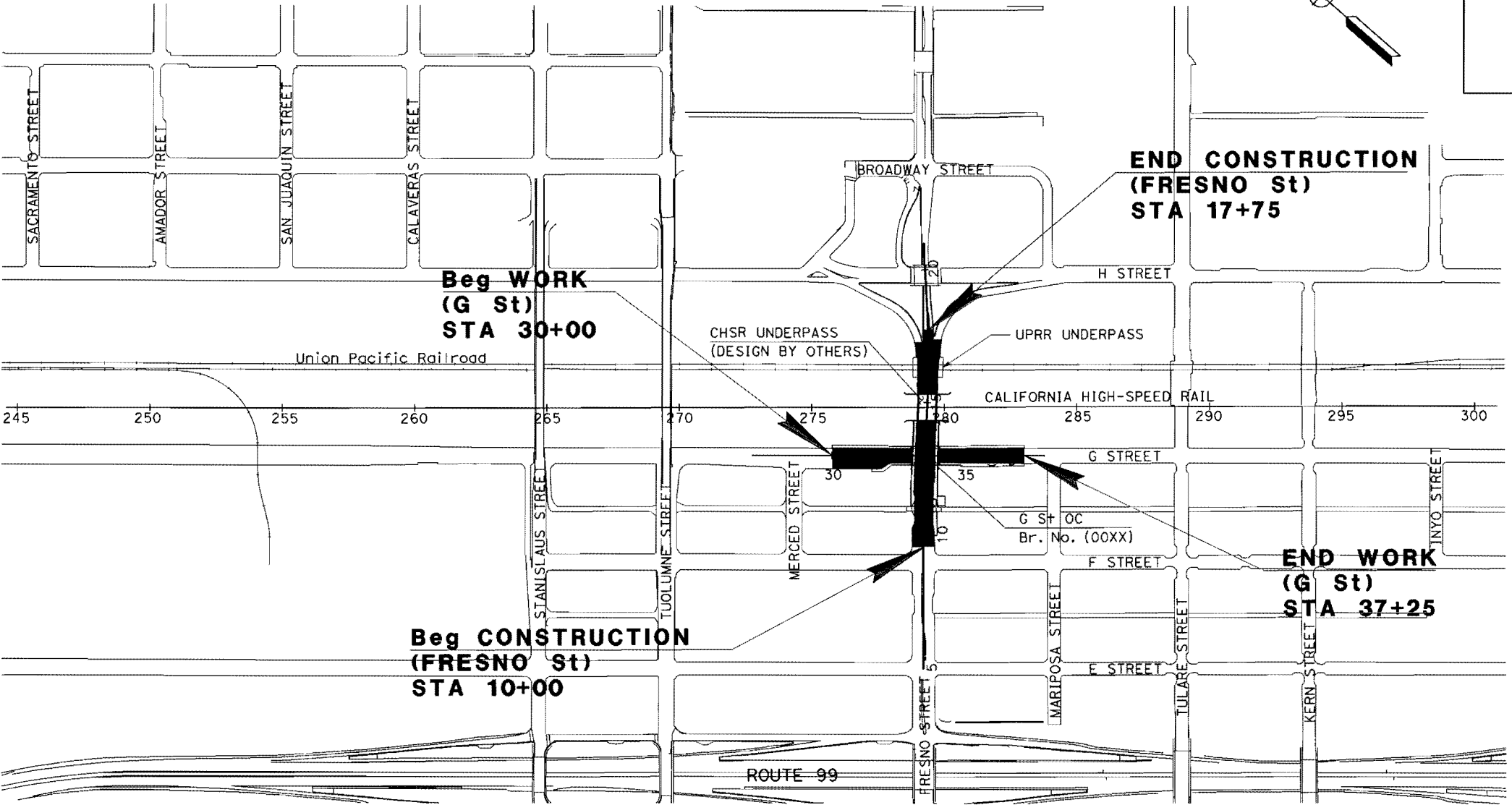
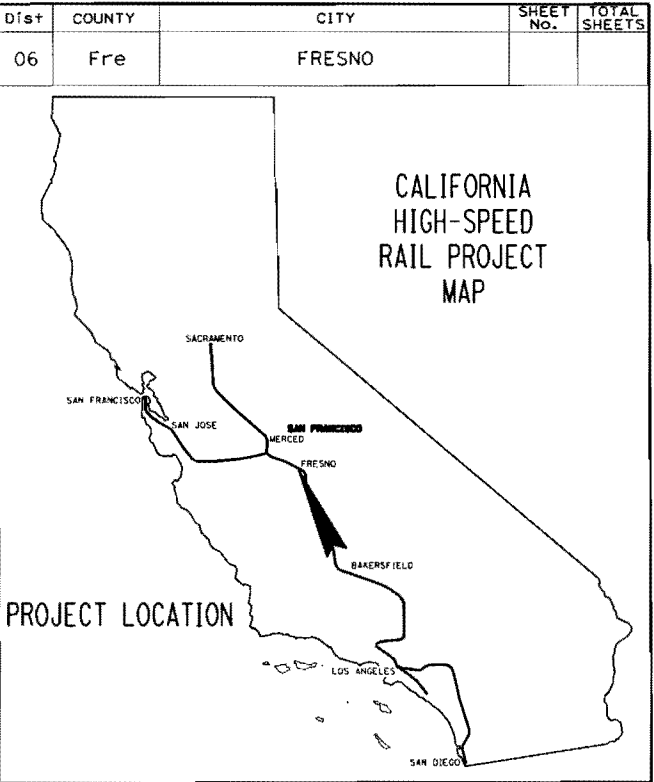




CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED RAIL PROJECT
SIERRA SUBDIVISION**

**IN FRESNO COUNTY IN FRESNO AT FRESNO
STREET/CHSRA UNDERPASS**



DESIGN ENGINEER	PROJECT MANAGER
ROBERTO BANDA	GARTH FERNANDEZ


THE CONTRACTOR SHALL POSSESS THE CLASS (OR CLASSES)
OF LICENSE AS SPECIFIED IN THE "NOTICE TO BIDDERS."

CHSTP CONTRACT No.

HSR/FRESNO St PROJECT (06-2HT201)

DRAWING	DRAWING DESCRIPTION	NUMBER OF SHEETS	CURRENT STATUS 5-30-12
DESIGN	TITLE SHEET	1	100%
DESIGN	INDEX OF DRAWINGS	1	100%
DESIGN	TYPICAL CROSS SECTIONS, X-1 - X-3	3	100%
DESIGN	LAYOUT, L-1, L-2	2	100%
DESIGN	PROFILE, P-1, P-2	2	100%
DESIGN	CONSTRUCTION DETAILS, C-1 - C-6 & C-10 - C-14	11	100%
DESIGN	CONSTRUCTION DETAILS, C-7 - C-9	3	70%
DESIGN	DRAINAGE PLAN, D-1, D-2	2	100%
DESIGN	DRAINAGE PROFILES, DP-1 - DP-6	6	100%
DESIGN	DRAINAGE DETAILS, DD-1 - DD-6	6	100%
DESIGN	DRAINAGE QUANTITIES, DQ-1, DQ-2	2	100%
DESIGN	UTILITY PLAN, U-1, U-2	2	60%
TRAFFIC	DETOUR PLAN, DE-1	1	100%
TRAFFIC	TRAFFIC HANDLING PLAN, TH-1, TH-2	2	100%
TRAFFIC	TRAFFIC HANDLING DETAILS, THD-1	1	100%
TRAFFIC	TRAFFIC HANDLING QUANTITIES, THQ-1	1	100%
TRAFFIC	PAVEMENT DELINEATION AND SIGN PLAN, PD-1, PD-2	2	100%
TRAFFIC	PAVEMENT DELINEATION AND SIGN QUANTITIES, PDQ-1, PDQ-2	2	100%
TRAFFIC	SIGN DETAILS, SD-1	1	100%
DESIGN	SUMMARY OF QUANTITIES	2	100%
ELECTRICAL	CITY STREET LIGHT AND SIGN ILLUMINATION, E-1 - E-3	3	100%
ELECTRICAL	MODIFY SIGNAL AND LIGHTING, MODIFY CLOSED CIRCUIT TELEVISION, E-4 - E-8	5	100%
ELECTRICAL	FIBER OPTIC CONVENTION (ELECTRICAL DETAIL)	1	100%
	TOTAL SHEETS	62	

LEGEND

NATURAL GAS	-----g-----g-----
ELECTRICAL	-----e-----e-----
ELECTRICAL (OVERHEAD)	-----e------(oh)-----
SEWER	-----s-----s-----
WATER	-----w-----w-----
STORM DRAIN	-----sd-----sd-----
TELEVISION	-----tv-----tv-----
FIBER OPTIC	-----fo-----fo-----
TELEMETER (OVERHEAD)	-----tc------(oh)-----
OIL	-----o-----o-----
PLACE HMA (Misc AREA)	

ABBREVIATIONS

Abut	ABUTMENT
AC	ASPHALT CONCRETE
Ang Pt	ANGLE POINT
Beg	BEGIN
BC	BEGIN CURVE
Br	BRIDGE
BVC	BEGIN VERTICAL CURVE
CaHSRA	CALIFORNIA HIGH SPEED RAIL AUTHORITY
CF	CUBIC FOOT
CHSR	CALIFORNIA HIGH SPEED RAIL
Cl	CLASS
Conc	CONCRETE
Const	CONSTRUCTION
CY	CUBIC YARD
Det	DETAIL, DETOUR
DI	DRAINAGE INLET, DROP INLET
Dia	DIAMETER
DWY	DRIVEWAY
EA	EACH
EC	END CURVE
Elev	ELEVATION
EP	EDGE OF PAVEMENT
ES	EDGE OF SHOULDER
EVC	END VERTICAL CURVE
Exist	EXISTING
FL	FLOW LINE
FO	FIBER OPTIC
FT	FOOT
H	HEIGHT
HMA	HOT MIX ASPHALT
IF	INSIDE FACE
L	LENGTH, ANGLE (STRUCTURAL
LB	POUND
LF	LINEAR FOOT
LOL	LAYOUT LINE
Lt	LEFT
Max	MAXIMUM
MBGR	METAL BEAM GUARD RAILING
MH	MANHOLE
Min	MINIMUM
Misc	MISCELLANEOUS
Mod	MODIFIED, MODIFY
No.	NUMBER
OD	OUTSIDE DIAMETER
OG	ORIGINAL GROUND

(ABBREVIATIONS CONTINUED)

PCC	PORTLAND CEMENT CONCRETE
Ped	PEDESTRIAN
PG	PROFILE GRADE
POC	POINT OF CURVE
POT	POINT OF TANGENT
Pvmt	PAVEMENT
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
Ret	RETAINING
Rt	RIGHT
RW	RETAINING WALL
R/W	RIGHT OF WAY
S	SOUTH, SLOPE
SD	STORM DRAIN
Shld	SHOULDER
SQFT	SQUARE FOOT
SQYD	SQUARE YARD
St	STREET
Sta	STATION
Str	STRUCTURE
SW	SIDEWALK
T	SEMI-TANGENT
Tot	TOTAL
Trans	TRANSITION
Typ	TYPICAL
UP	UNDERPASS
UPRR	UNION PACIFIC RAILROAD
Var	VARIABLE, VARIES
VC	VERTICAL CURVE
©	CENTERLINE


Dis#	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL No.	SHEETS
06	Fre				

Millito Baca 5/29/12
 REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

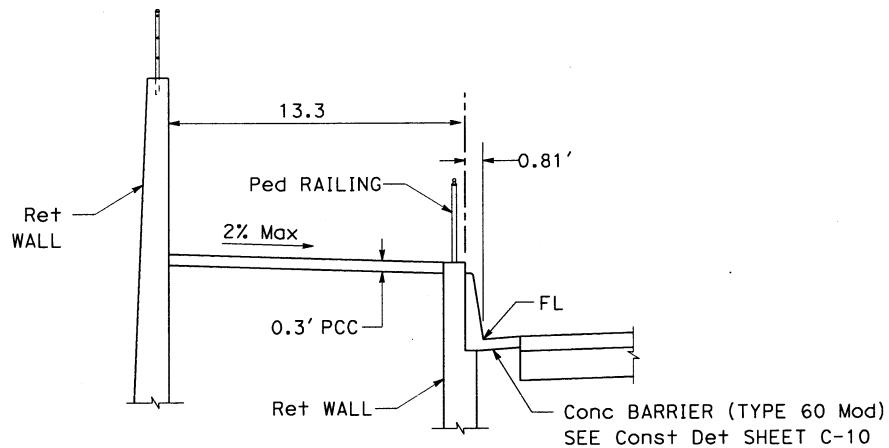
THE STATE OF CALIFORNIA OR ITS OFFICERS
 OR AGENTS SHALL NOT BE RESPONSIBLE FOR
 THE ACCURACY OR COMPLETENESS OF SCANNED
 COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER
 GILBERTO
 BACA
 No. 63140
 Exp. 6/30/12
 CIVIL
 STATE OF CALIFORNIA

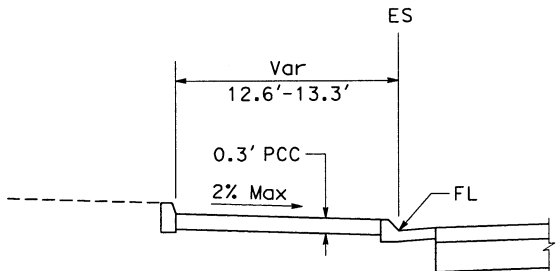


CALIFORNIA
 HIGH-SPEED RAIL AUTHORITY

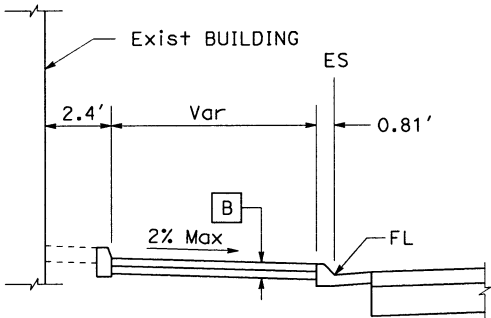
SHEET INDEX
NO SCALE



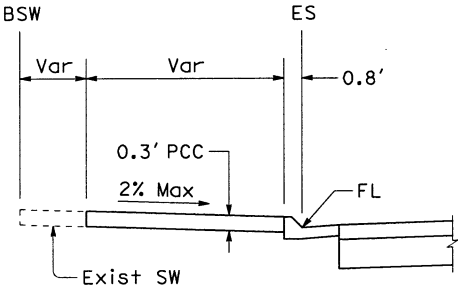
Sta "FFS" 11+18.00 TO 12+00.00, Lt
Sta "FFS" 11+50.00 TO 12+00.00, Rt



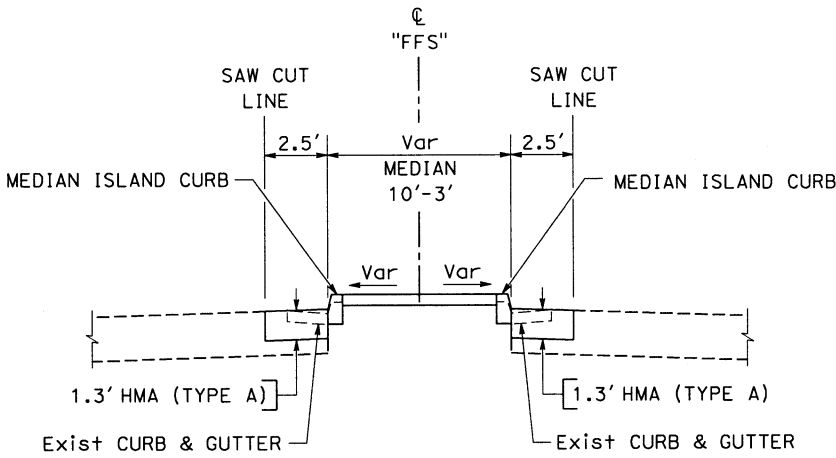
Sta "FFS" 11+06.00 TO 11+18.00, Lt & Rt



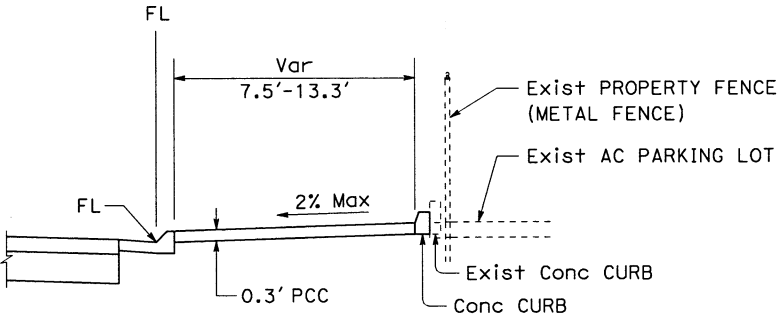
Sta "FFS" 10+53.74 TO 10+87.60, Lt



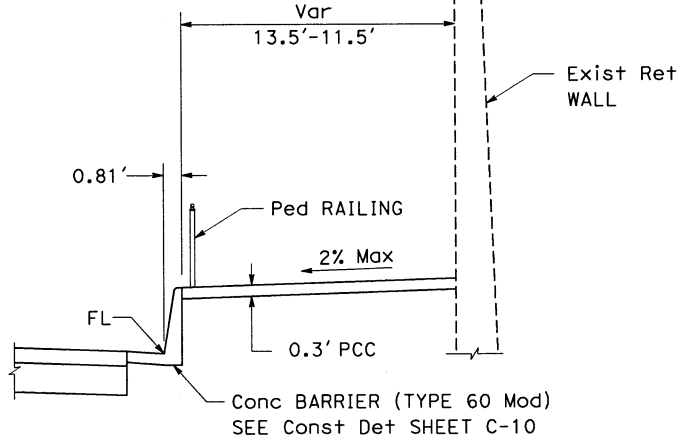
Sta "FFS" 10+25.00 TO 10+53.74, Lt



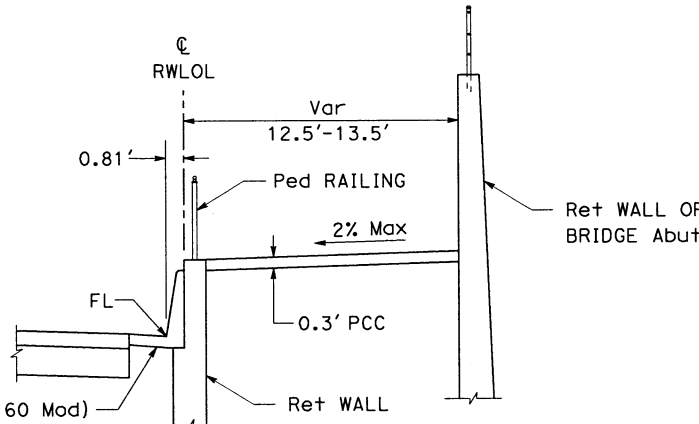
Sta "FFS" 16+75.00 TO 18+40.00



Sta "FFS" 10+00.00 TO 11+50.00, Rt



Sta "FFS" 15+75.00 TO 16+75.00, Rt & Lt



Sta "FFS" 12+00.00 TO 15+75.00, Rt & Lt

TYPICAL CROSS SECTIONS
NO SCALE
X-2

Dist 06

County Fre

Route

Post Miles TOTAL PROJECT

SHEET No. 63140

TOTAL SHEETS

Gilberto Baca


5/29/12

REGISTERED CIVIL ENGINEER

DATE

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

 CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

REGISTERED PROFESSIONAL ENGINEER

GILBERTO BACA

No. 63140

Exp. 6/30/12

CIVIL

STATE OF CALIFORNIA

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Fre				

GILBERTO BACA

63140

6/30/12

CIVIL

REGISTERED PROFESSIONAL ENGINEER

STATE OF CALIFORNIA

5/29/12


DATE

GILBERTO BACA

REGISTERED CIVIL ENGINEER

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

The figure displays three typical cross-sections of G Street, labeled as "G STREET" with stationing ranges. Each section shows the profile grade (PG) and finished floor (FL) lines, with a 2% cross-slope. The sections are defined by stationing ranges: Sta "GST" 30+00.00 TO 32+25.00, Sta "GST" 31+50.00 TO 32+35.00, and Sta "GST" 32+35.00 TO 32+97.14. The cross-sections show a 10' & Var width, a 7' width, and a 10' & Var width. The sections are labeled with "G STREET" and "G STREET" with stationing ranges. The sections are labeled with "G STREET" and "G STREET" with stationing ranges. The sections are labeled with "G STREET" and "G STREET" with stationing ranges.

TYPICAL CROSS SECTIONS
NO SCALE
X-3

BORDER LAST REVISED 7/2/2010

USERNAME => s126560
DGN FILE => 062HT20ca003.dgn

RELATIVE BORDER SCALE
IS IN INCHES

0 1 2 3

UNIT 1469

PROJECT NUMBER & PHASE 0612000239-1

CHSTP CONTRACT No.

DATE PLOTTED => 30-MAY-2012
TIME PLOTTED => 11:05

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT CALIFORNIA HIGH SPEED RAIL AUTHORITY.
2. FOR DRIVEWAY DETAILS SEE CONSTRUCTION DETAILS SHEETS.

CURVE DATA				
No.	R	Δ	T	L
(1)	5000.00'	2° 34' 0.93"	112.02'	224.01'

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
06	Fre				

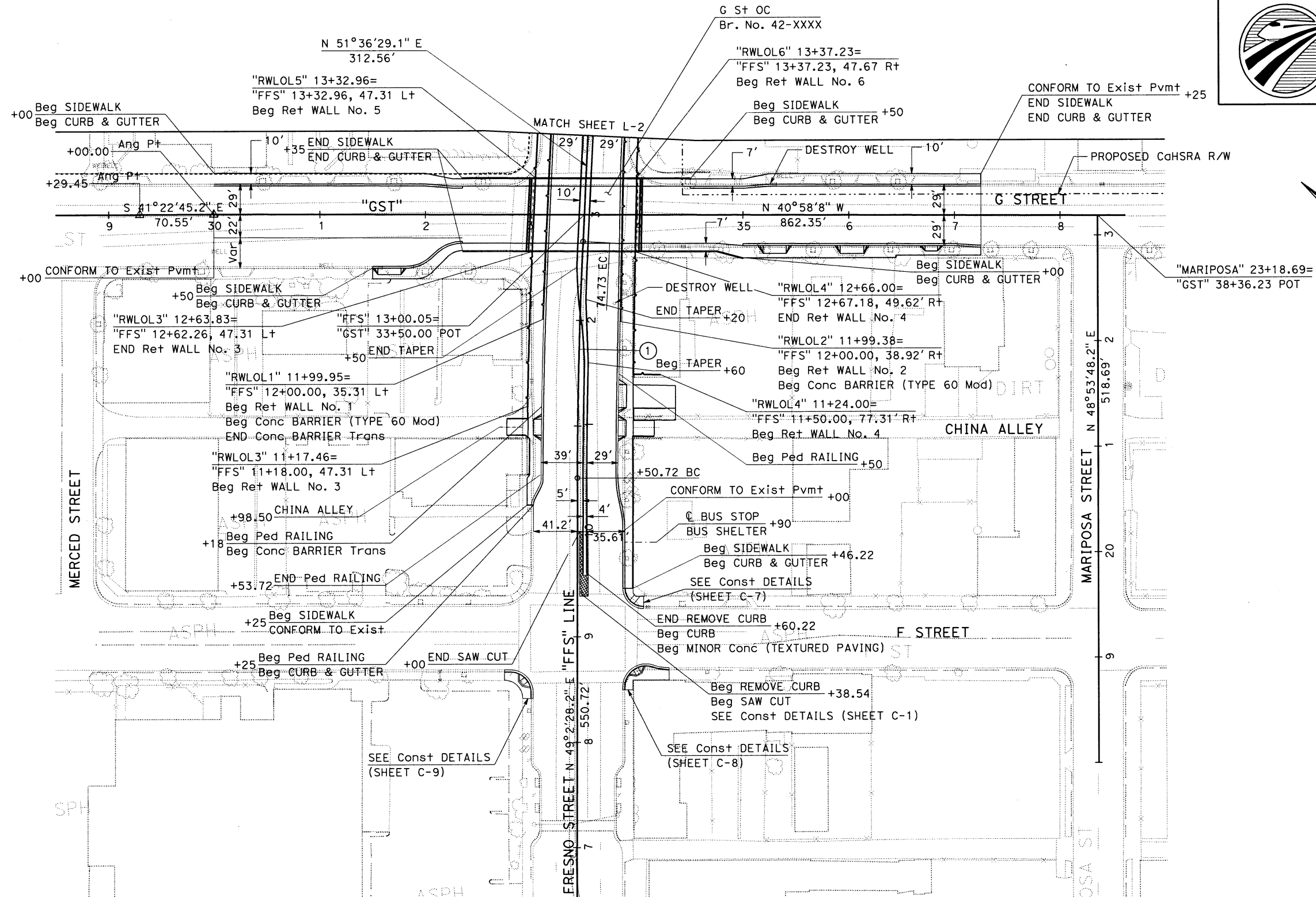
Gilberto Baca
REGISTERED CIVIL ENGINEER

5/29/12
DATE

PLANS APPROVAL DATE

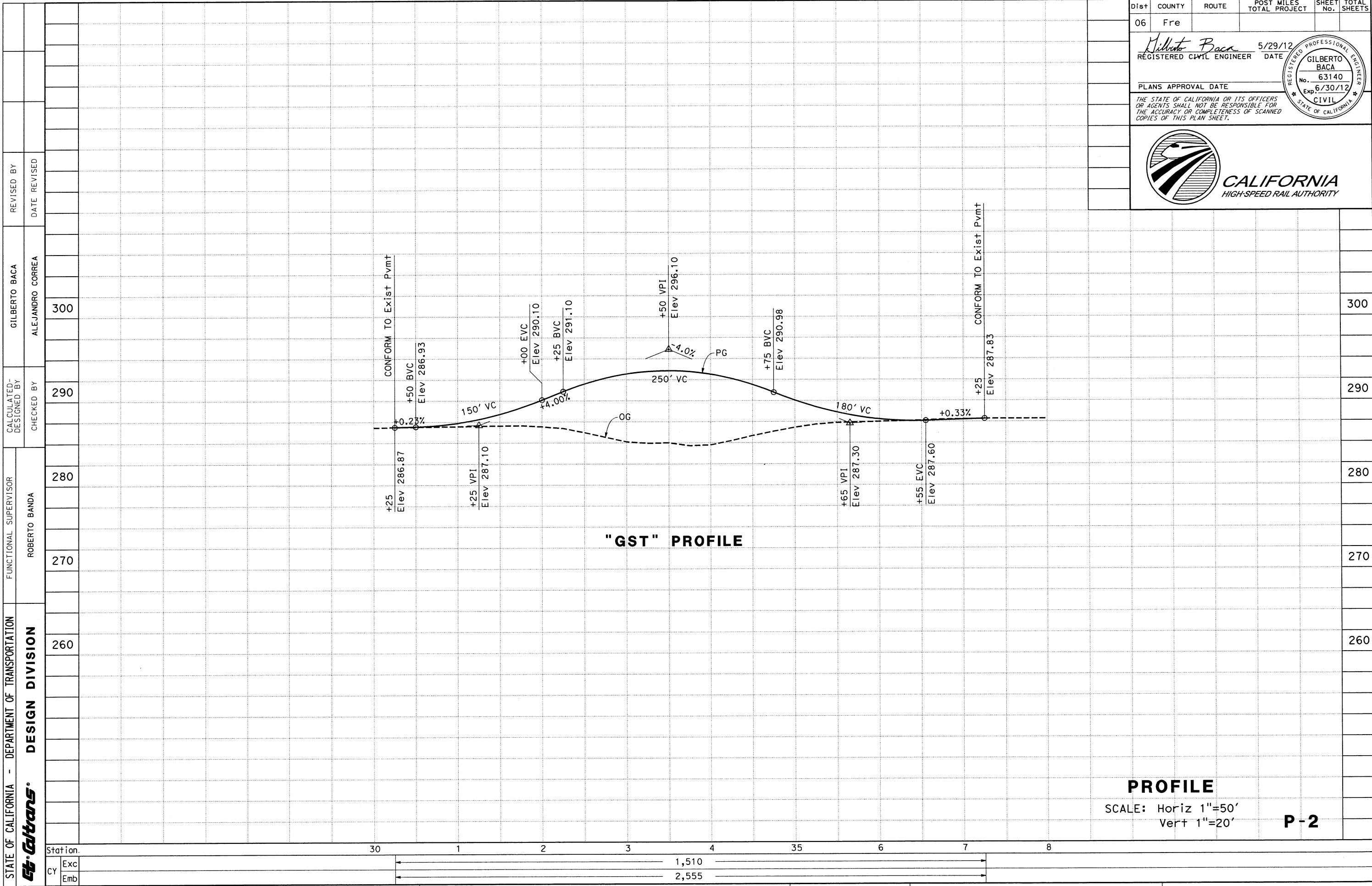
THE STATE OF CALIFORNIA OR ITS OFFICERS
OR AGENTS SHALL NOT BE RESPONSIBLE FOR
THE ACCURACY OR COMPLETENESS OF SCANNED
COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER
GILBERTO
BACA
No. 63140
Exp. 6/30/12
CIVIL
STATE OF CALIFORNIA



LAYOUT
SCALE: 1" = 50'

L-1



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Fre				

REGISTERED CIVIL ENGINEER DATE 5/29/12

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

GILBERTO BACA
No. 63140
Exp. 6/30/12
CIVIL

CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

Dist	COUNTY	ROUTE	POST MILES	SHEET	TOTAL
06	Fre		TOTAL PROJECT	No.	SHEETS

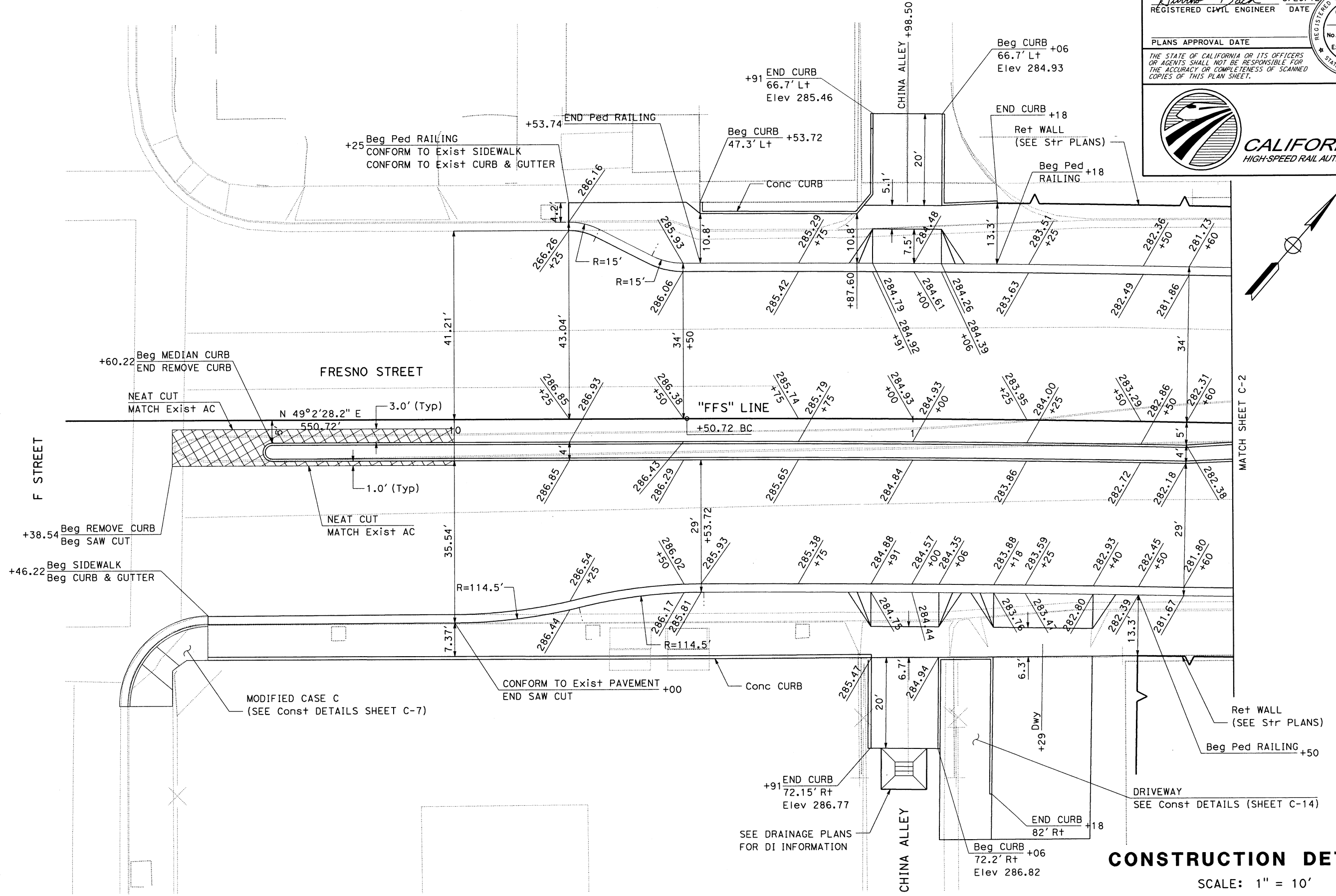
Gilberto Baca 5/29/12
 REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

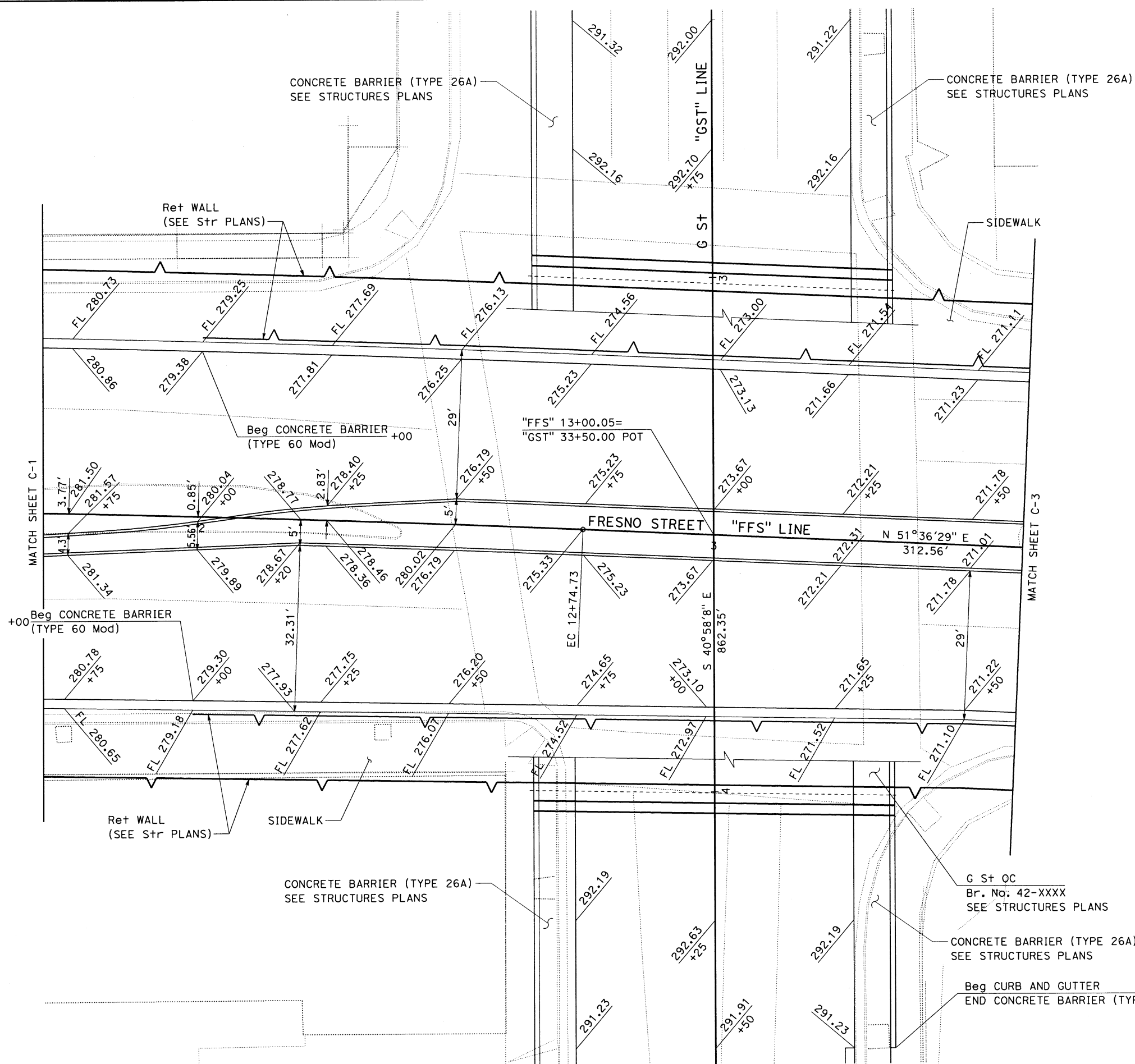
THE STATE OF CALIFORNIA OR ITS OFFICERS
 OR AGENTS SHALL NOT BE RESPONSIBLE FOR
 THE ACCURACY OR COMPLETENESS OF SCANNED
 COPIES OF THIS PLAN SHEET.

GILBERTO BACA
 No. 63140
 Exp. 6/30/12
 CIVIL
 STATE OF CALIFORNIA

CALIFORNIA
 HIGH-SPEED RAIL AUTHORITY



CONSTRUCTION DETAILS
 SCALE: 1" = 10'
C-1



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Fre				

Gilberto Baca
REGISTERED CIVIL ENGINEER
DATE 5/29/12

REGISTERED PROFESSIONAL ENGINEER

GILBERTO BACA

No. 63140

Exp. 6/30/12

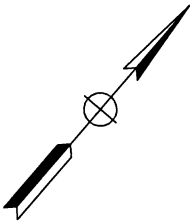
CIVIL

STATE OF CALIFORNIA

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

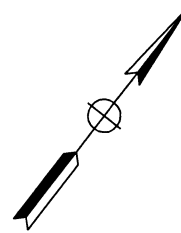


CONSTRUCTION DETAILS

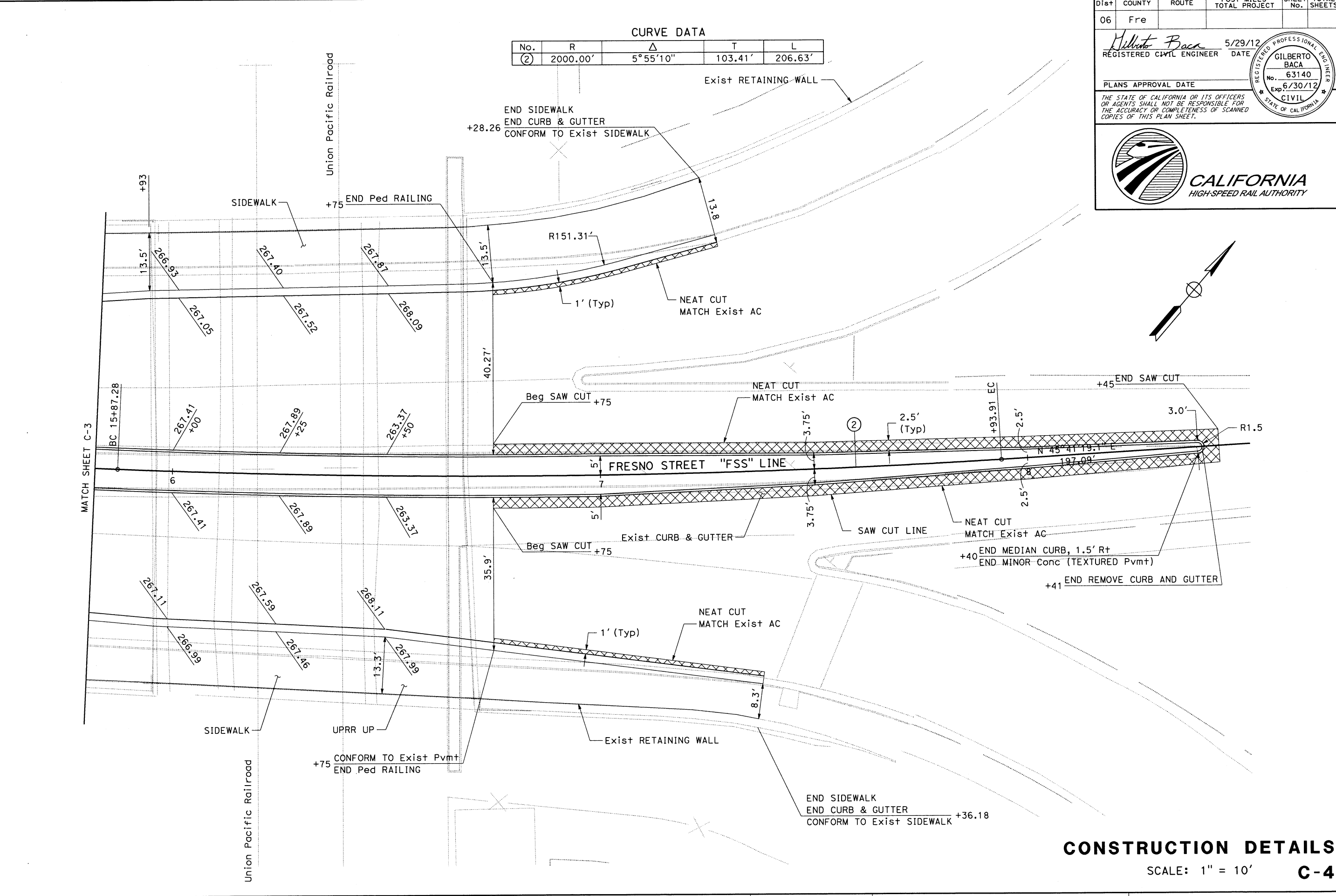
SCALE: 1" = 10'

C-2

x
x
x
x
x



C-3





Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Fre				

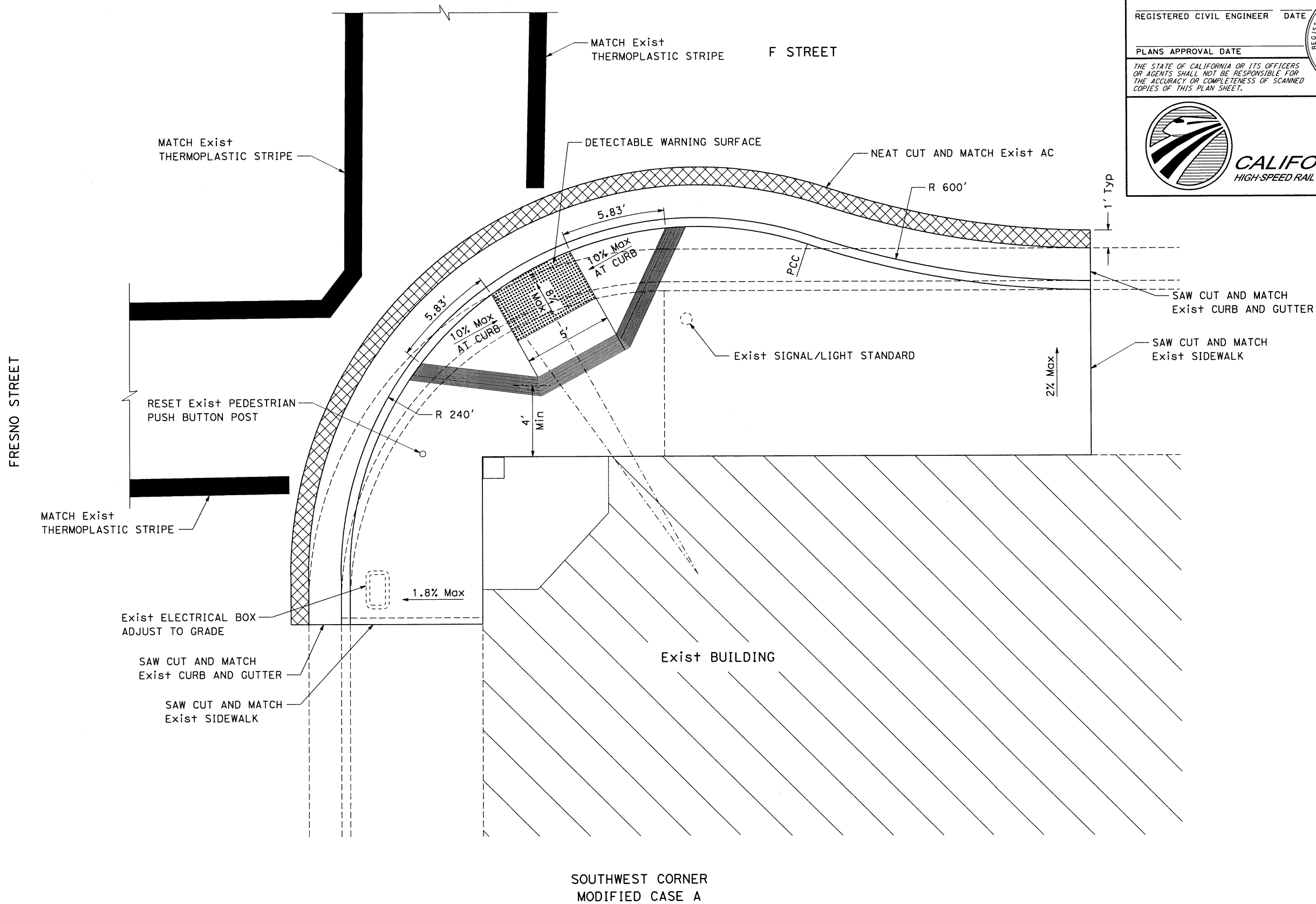
REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS
OR AGENTS SHALL NOT BE RESPONSIBLE FOR
THE ACCURACY OR COMPLETENESS OF SCANNED
COPIES OF THIS PLAN SHEET.

 CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

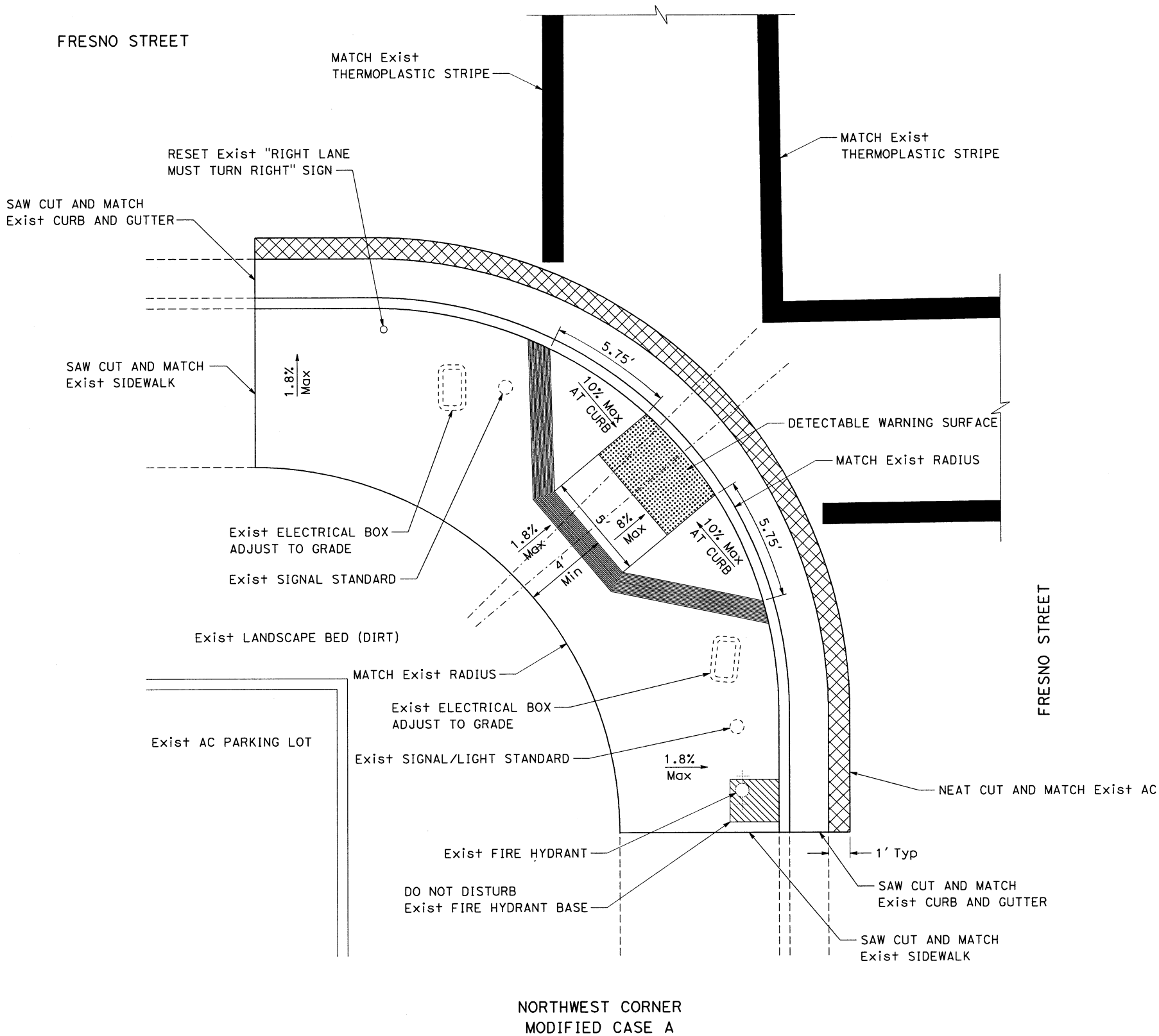




CONSTRUCTION DETAILS

NO SCALE

C-8



CONSTRUCTION DETAILS

NO SCALE

C-9

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Fre				

REGISTERED CIVIL ENGINEER

DATE

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS
OR AGENTS SHALL NOT BE RESPONSIBLE FOR
THE ACCURACY OR COMPLETENESS OF SCANNED
COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER

No.

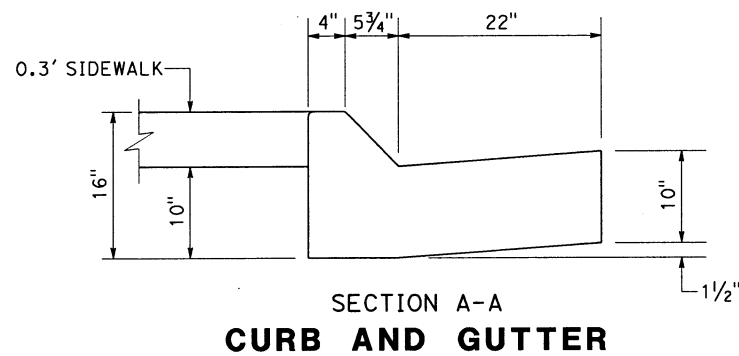
Exp.

CIVIL

STATE OF CALIFORNIA

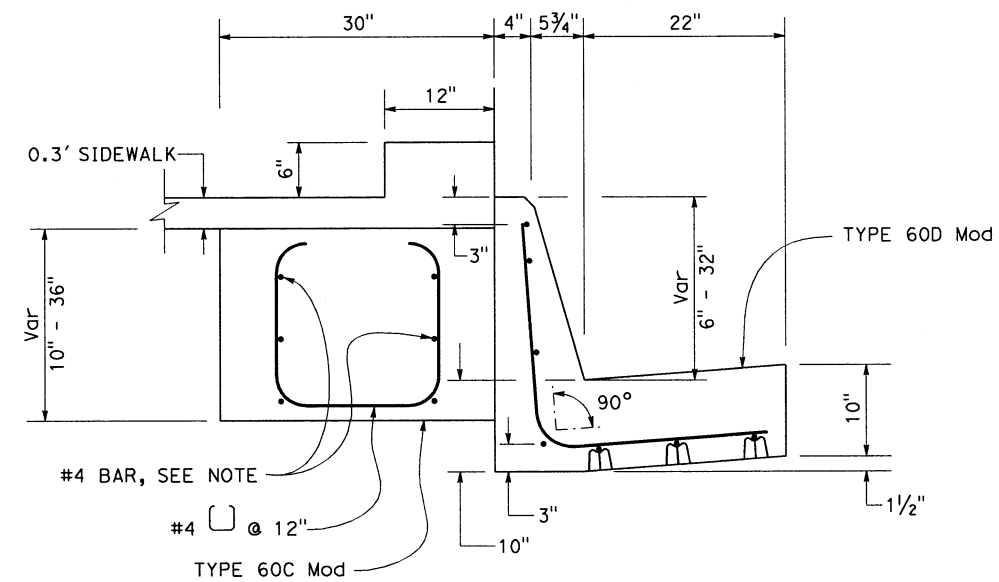
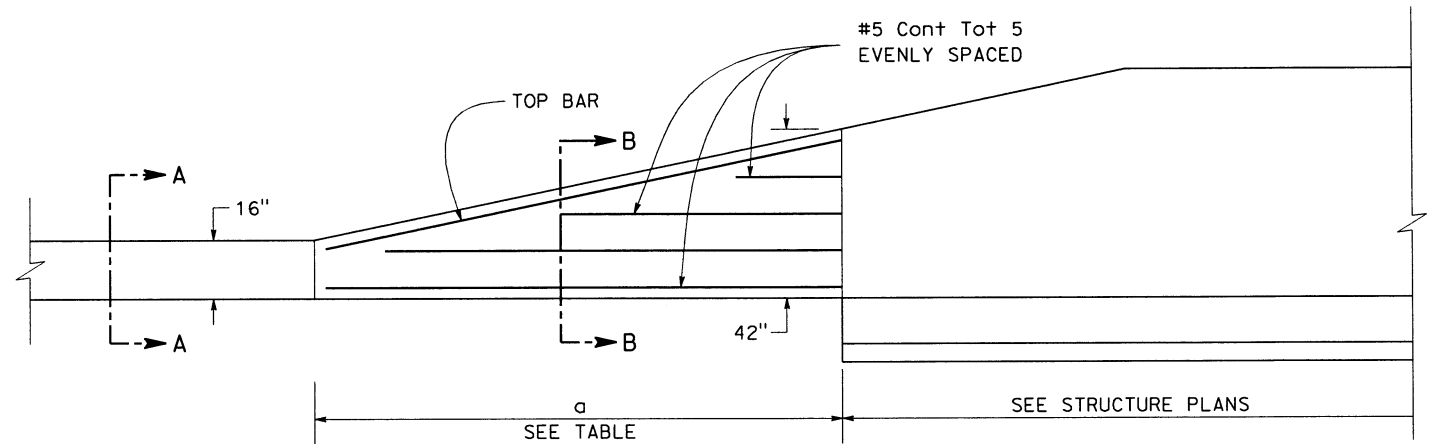
CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

USE TWO #4 REBARS AT 3" ABOVE THE BOTTOM AND TWO #4 REBARS AT EVERY 8" INCREMENT VERTICAL SPACING ABOVE THE FIRST TWO #4 REBARS.



SECTION A-A
CURB AND GUTTER

STATION	a (FT)
11+18.00 TO 12+00.00, L+	82'
11+50.00 TO 12+00.00, R+	50'
15+75.00 TO 16+75.00, L+	100'
15+75.00 TO 16+75.00, R+	100'



SECTION B-B
Conc BARRIER (TYPE 60 Mod) TRANSITION

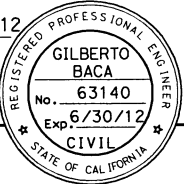
C-10


Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Fre				

Willie Baca 5/29/12
 REGISTERED CIVIL ENGINEER DATE

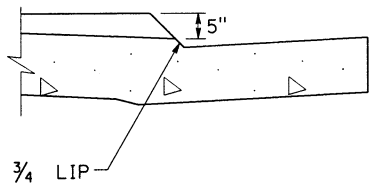
PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS
 OR AGENTS SHALL NOT BE RESPONSIBLE FOR
 THE ACCURACY OR COMPLETENESS OF SCANNED
 COPIES OF THIS PLAN SHEET.

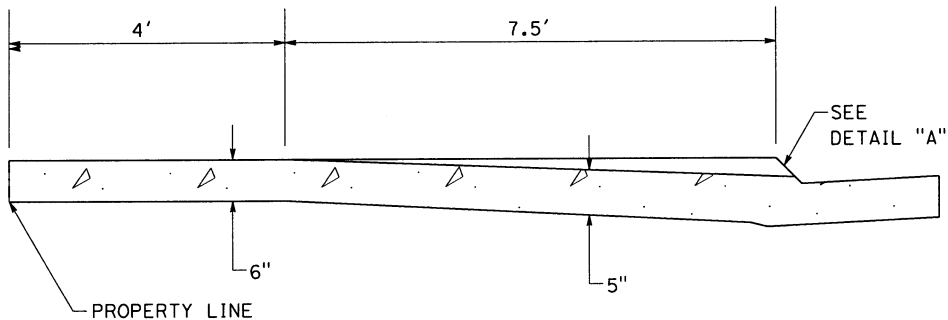




CALIFORNIA
 HIGH-SPEED RAIL AUTHORITY



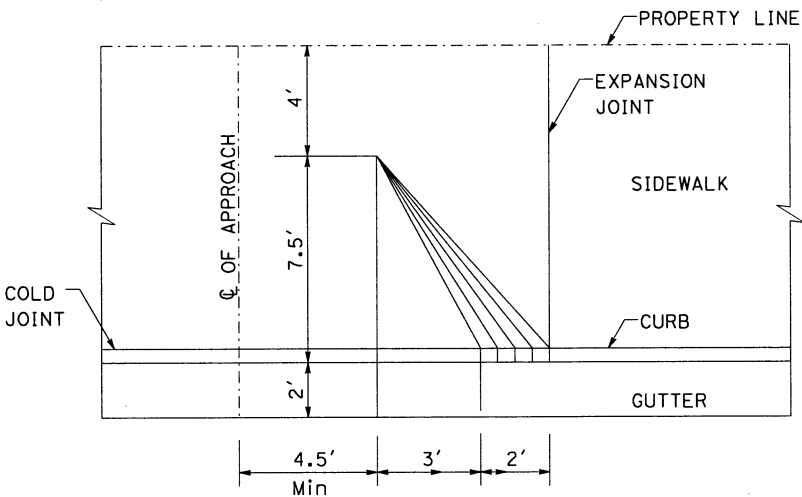
DETAIL "A"



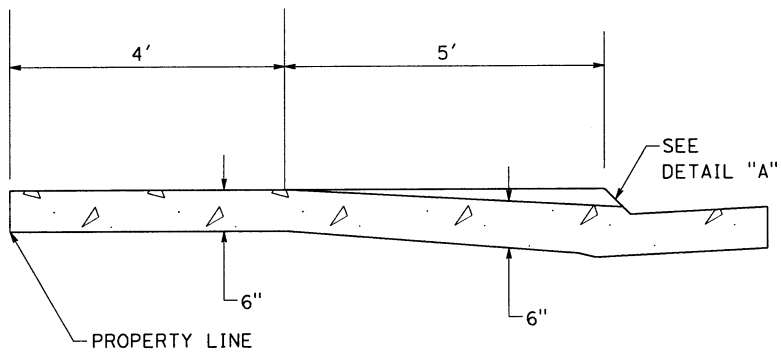
11.5' PATTERN

DRIVEWAY APPROACH

Sta "GST" 36+03.00



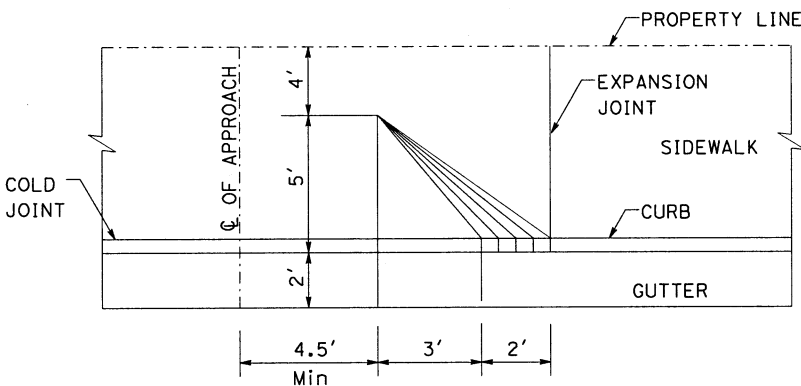
PLAN



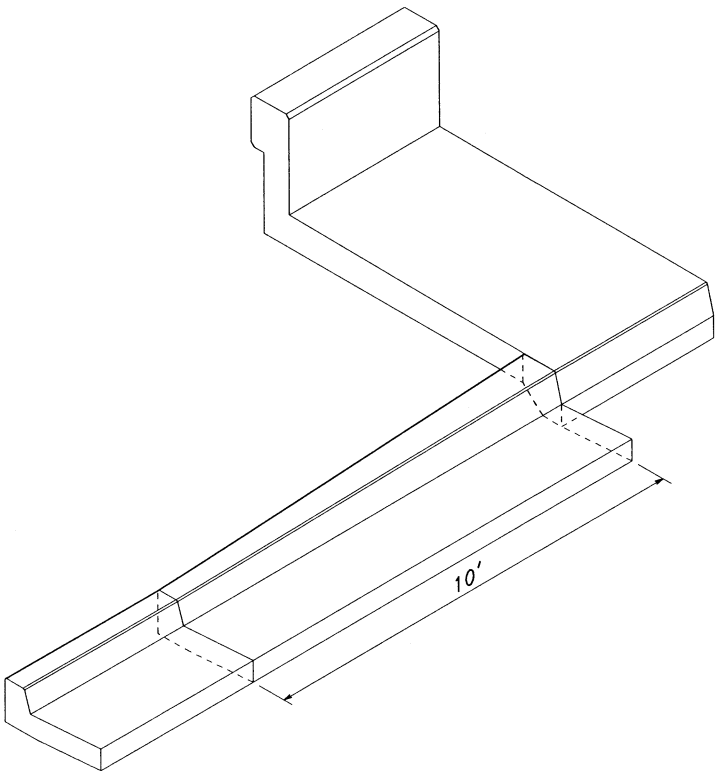
9' PATTERN

DRIVEWAY APPROACH

Sta "GST" 36+78.00



PLAN

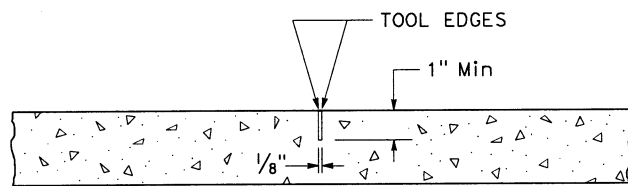


TRANSITION CURB & GUTTER TO
TYPE 26A CONCRETE BARRIER

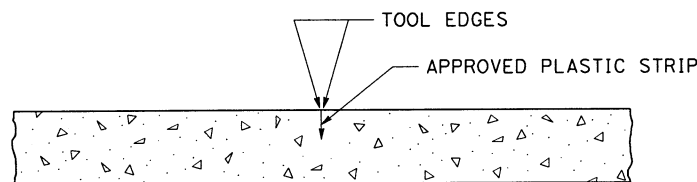
CONSTRUCTION DETAILS

NO SCALE

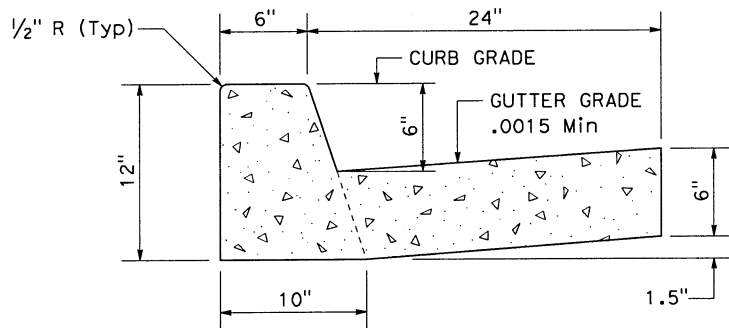
C-11



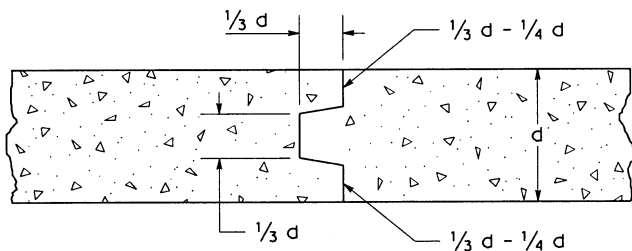
WEAKENED PLANE JOINT



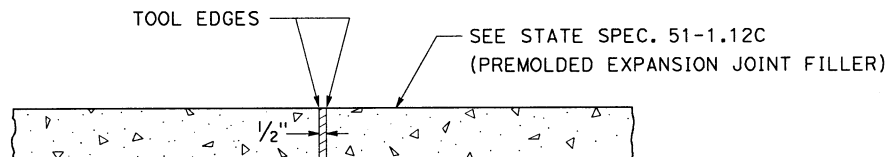
ALTERNATE DESIGN WEAKENED PLANE JOINT



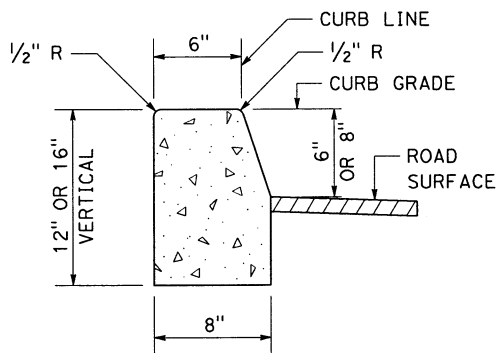
CROSS-SECTION OF MONOLITHIC CURB AND GUTTER



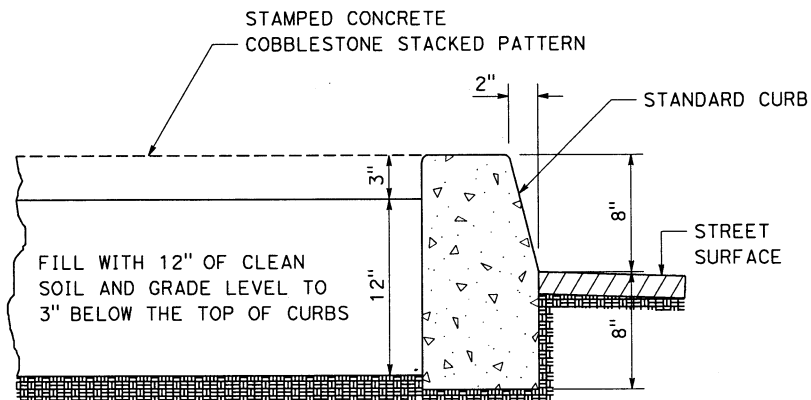
CONSTRUCTION JOINT



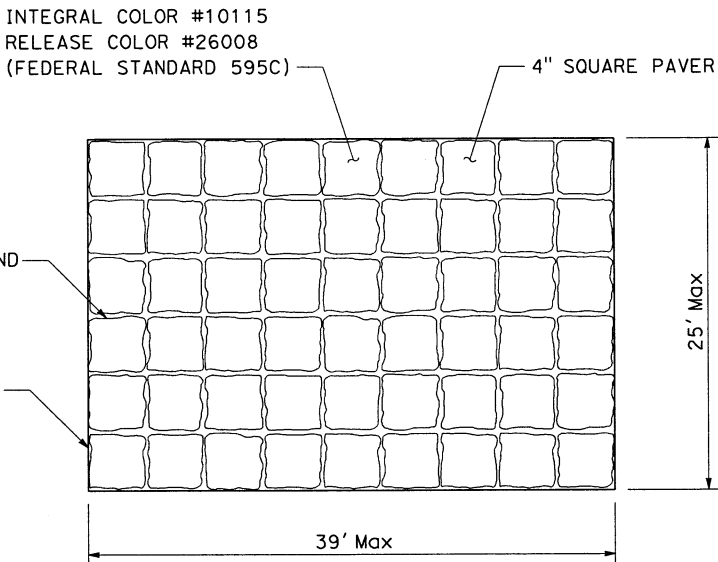
EXPANSION JOINT



CROSS-SECTION OF CURB



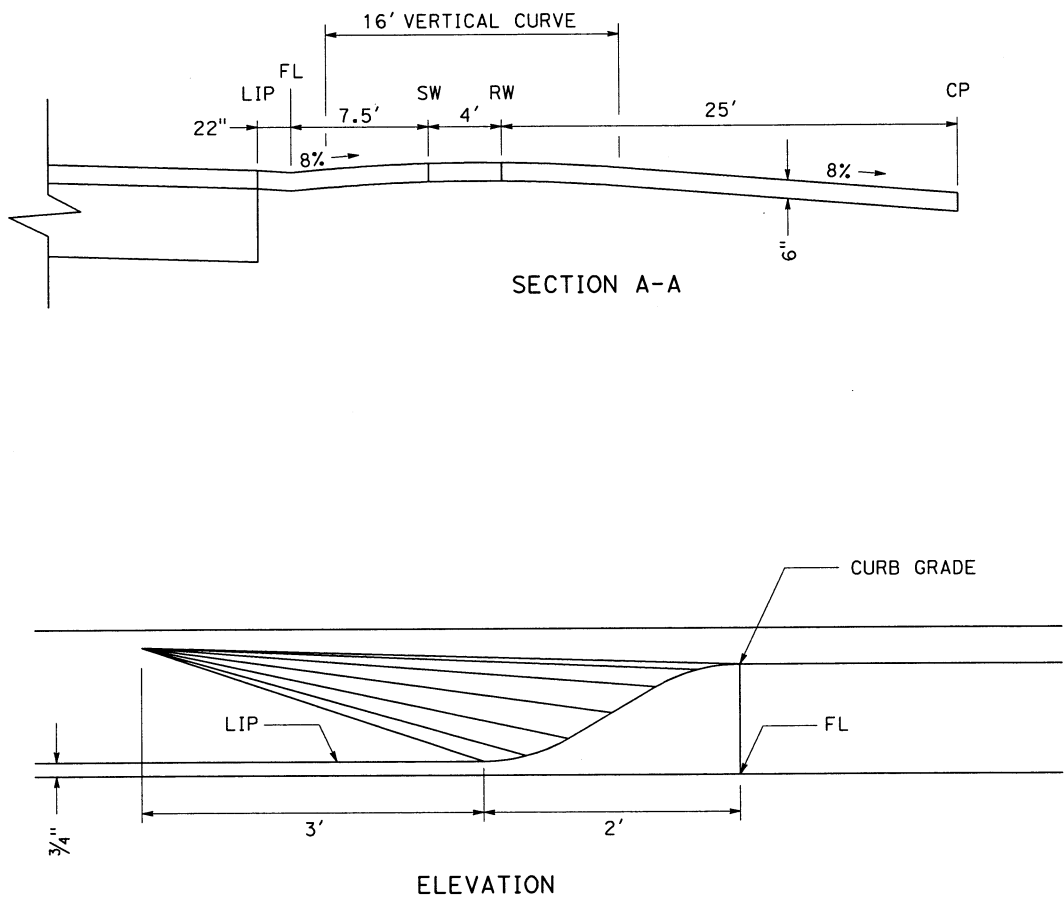
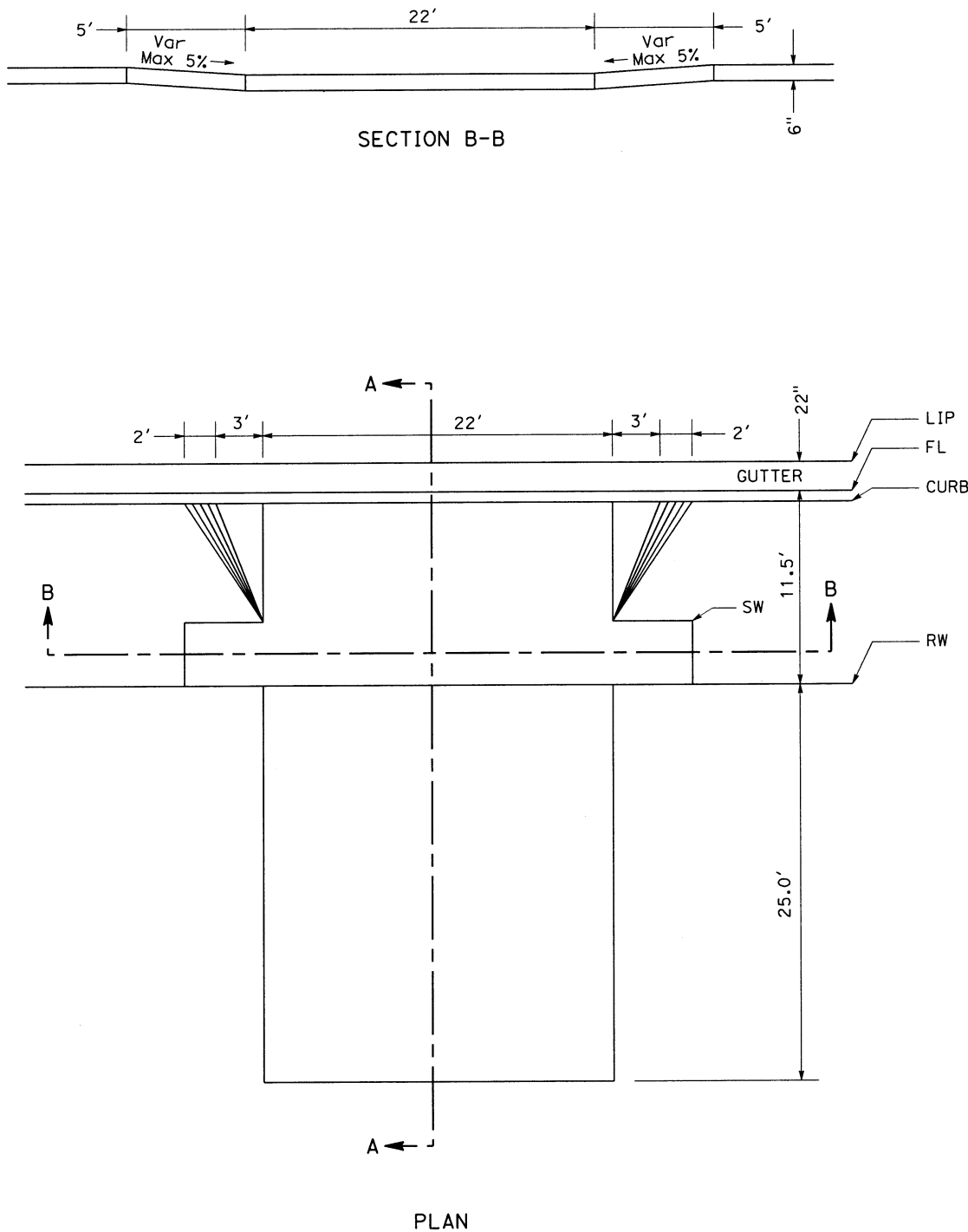
MEDIAN ISLAND CURB



COBBLESTONE STACKED PATTERN

CONCRETE CURB CONSTRUCTION DETAILS

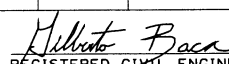
CONSTRUCTION DETAILS
NO SCALE
C-12



DRIVEWAY APPROACH
Sta "GST" 31+66.00
Sta "GST" 35+30.00

CONSTRUCTION DETAILS
NO SCALE
C-13


DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Fre				


REGISTERED CIVIL ENGINEER

5/29/12
DATE

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.


CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

REGISTERED PROFESSIONAL ENGINEER

GILBERTO BACA

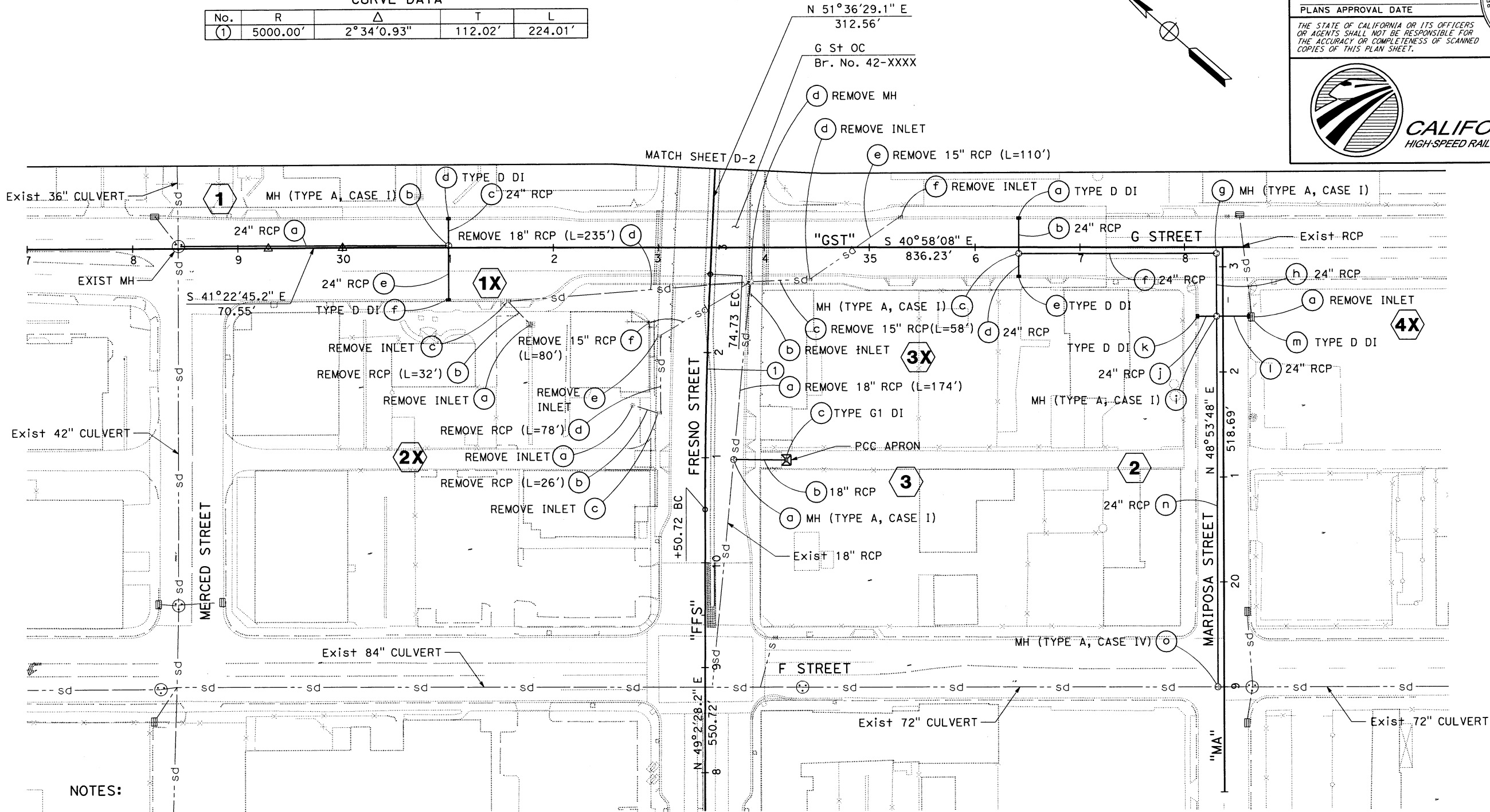
No. 63140

Exp. 6/30/12

CIVIL

STATE OF CALIFORNIA

CURVE DATA				
No.	R	Δ	T	L
(1)	5000.00'	2°34'0.93"	112.02'	224.01'



NOTES:

1. SEE DRAINAGE DETAILS FOR MANHOLE AND INLET INFORMATION.
2. ALL WORK SHALL BE DONE IN ACCORDANCE WITH STANDARD PLANS AND SPECIFICATIONS OF THE FRESNO METROPOLITAN FLOOD CONTROL DISTRICT, DATED APRIL 1, 2011 AND REVISIONS THERETO.
3. BEFORE COMMENCING EXCAVATION, THE CONTRACTOR SHALL NOTIFY ALL UTILITY AUTHORITIES OR UTILITY COMPANIES HAVING INTEREST IN THE WORK OF THE CONTRACTORS INTENTION TO EXCAVATE PROXIMATE TO EXISTING FACILITIES AND THE CONTRACTOR SHALL VERIFY THE LOCATION, DEPTH, AND SIZE OF ALL UTILITIES IN THE WORK AREA.
4. TWO WORKING DAYS BEFORE PERFORMING ANY EXCAVATION THE CONTRACTOR SHALL CALL "USA" (UNDERGROUND SERVICE ALERT) TOLL FREE 811.
5. THE CONTRACTOR SHALL NOTIFY THE CITY OF FRESNO CONSTRUCTION MANAGEMENT INSPECTION SERVICES AT (559) 621-5600 AND THE COUNTY OF FRESNO CONSTRUCTION DIVISION AT (559) 600-4247, A MINIMUM 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.

Dist

COUNTY

ROUTE

POST MILES

SHEET

TOTAL

06

Fre

No.

SHEETS

Gilberto Baca

5/29/12

REGISTERED CIVIL ENGINEER

DATE

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER

GILBERTO BACA

No. 63140

Exp. 6/30/12

CIVIL

STATE OF CALIFORNIA

CALIFORNIA

HIGH-SPEED RAIL AUTHORITY

CURVE DATA				
No.	R	Δ	T	L
(2)	2000.00'	5°55'10"	103.41'	206.63'

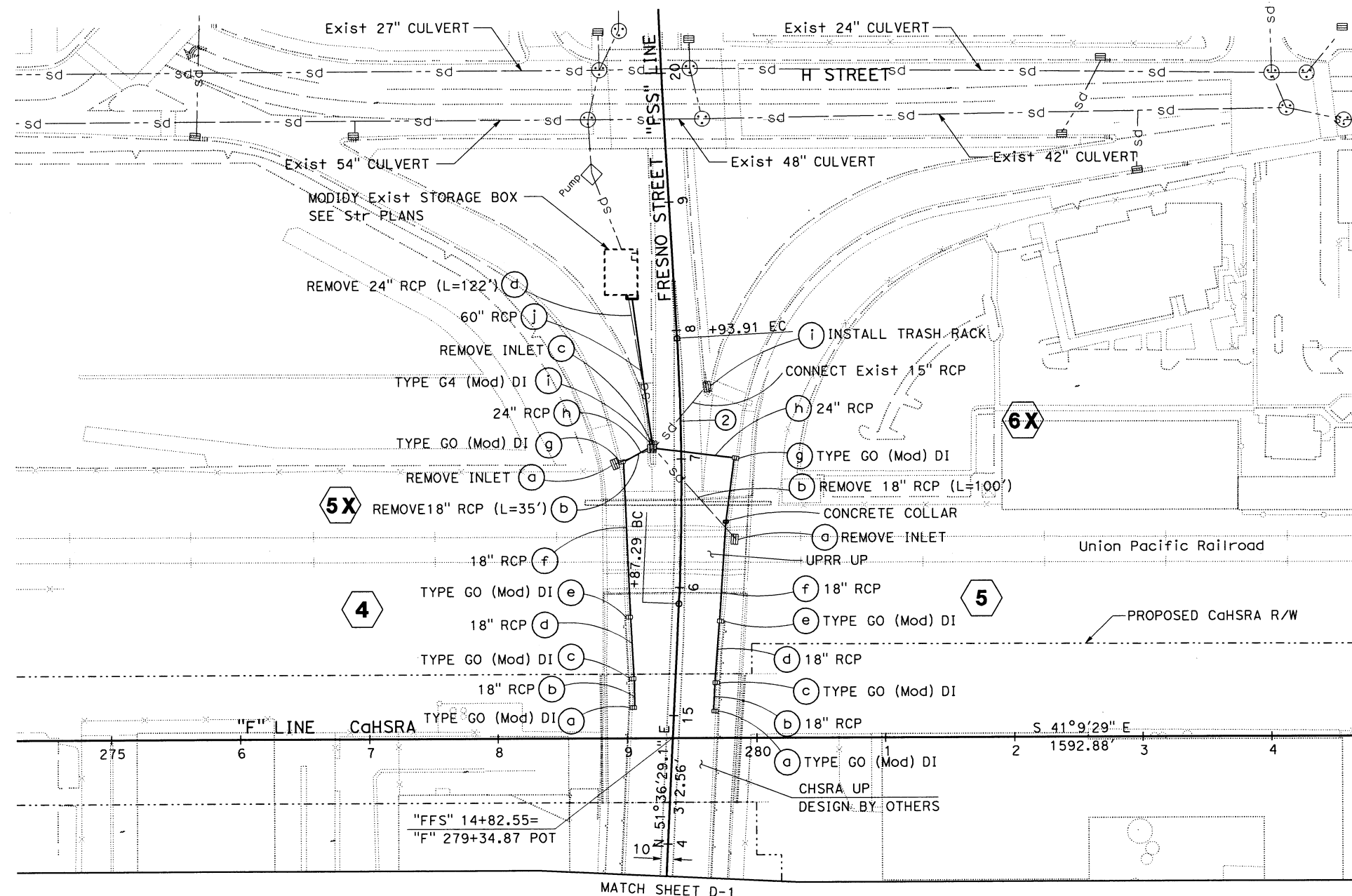
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Fre				

Hilbert Baca 5/29/12
 REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS
 OR AGENTS SHALL NOT BE RESPONSIBLE FOR
 THE ACCURACY OR COMPLETENESS OF SCANNED
 COPIES OF THIS PLAN SHEET.

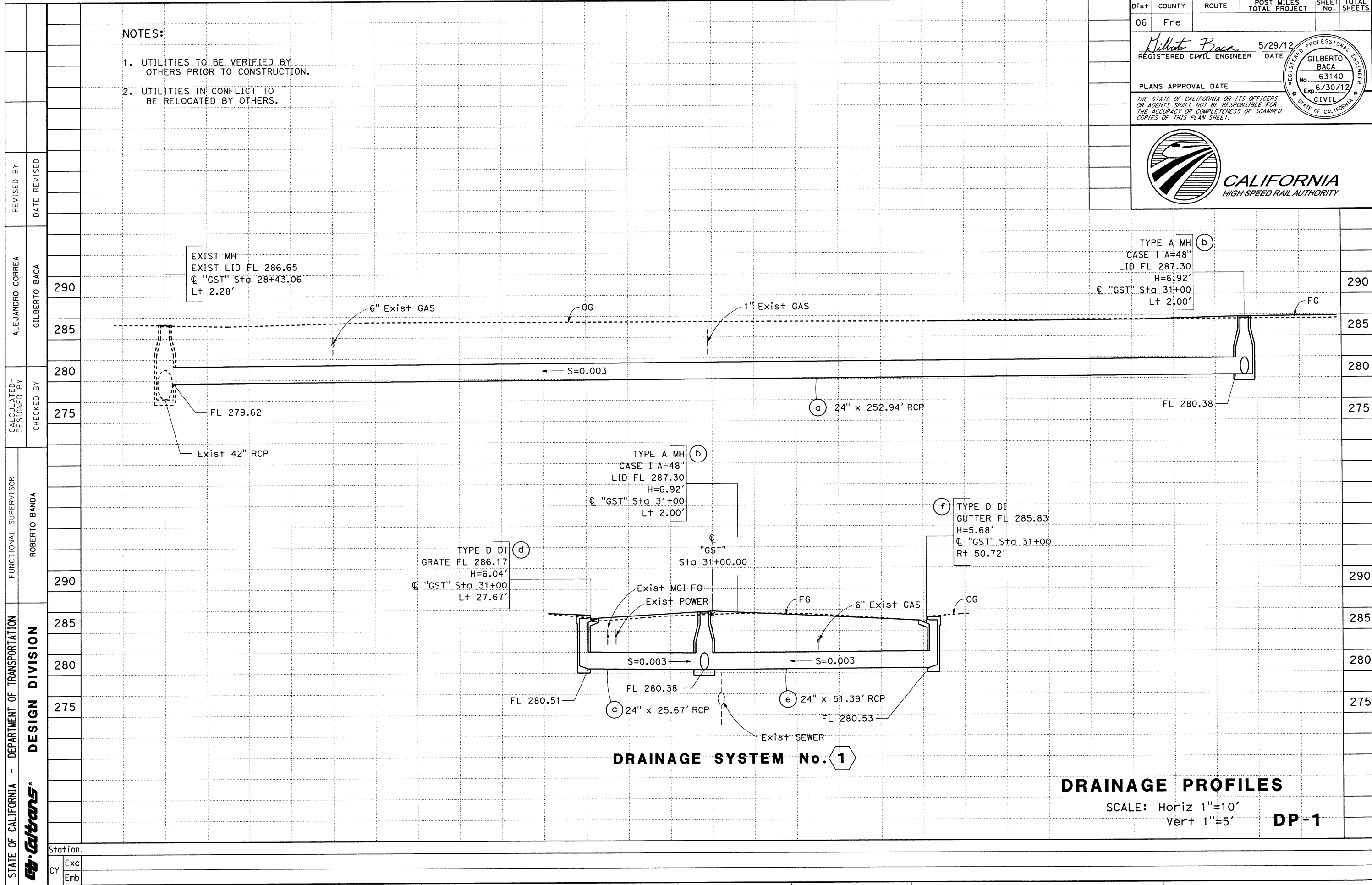
GILBERTO BACA
 No. 63140
 Exp. 6/30/12
 CIVIL
 STATE OF CALIFORNIA

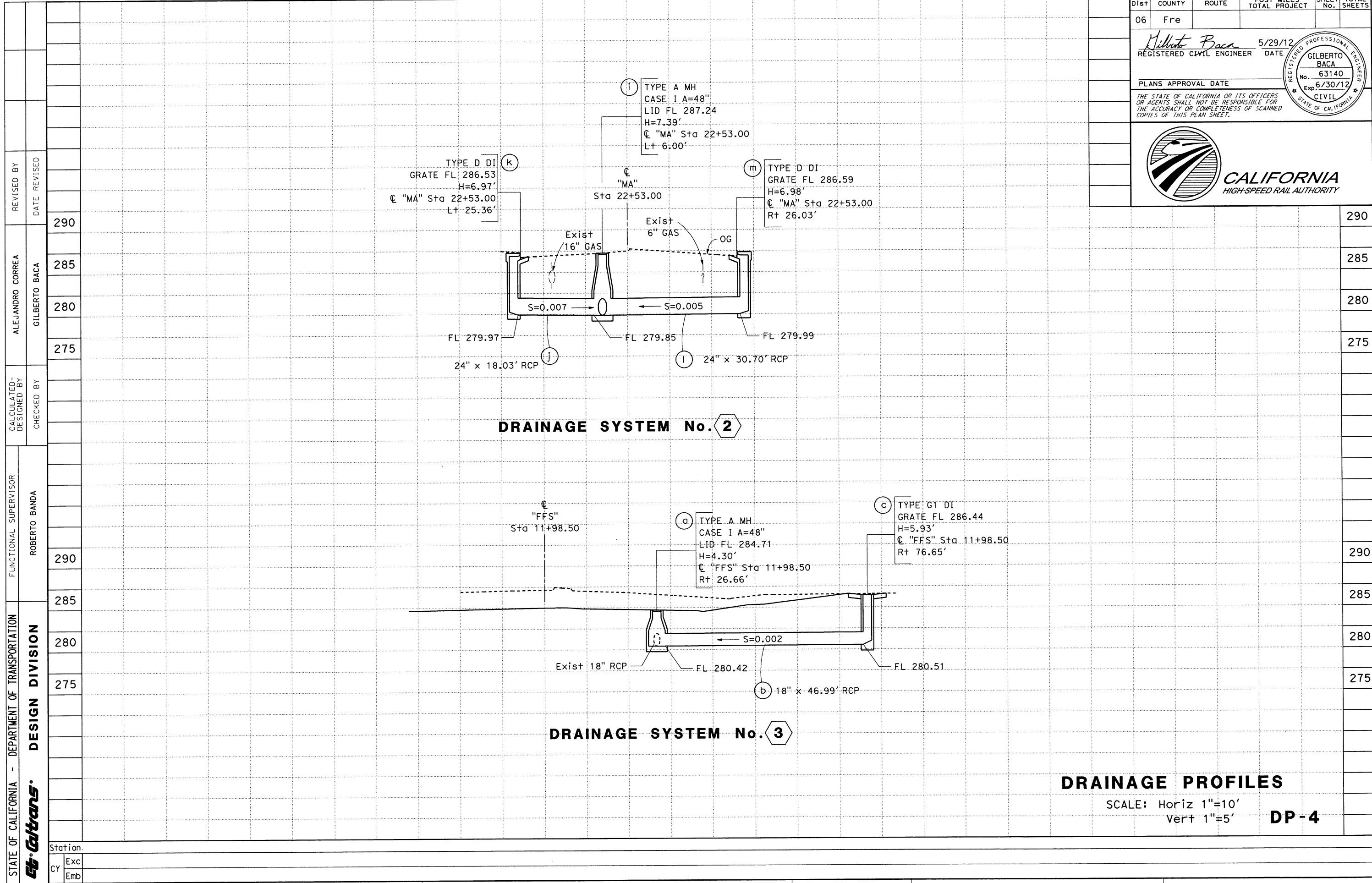


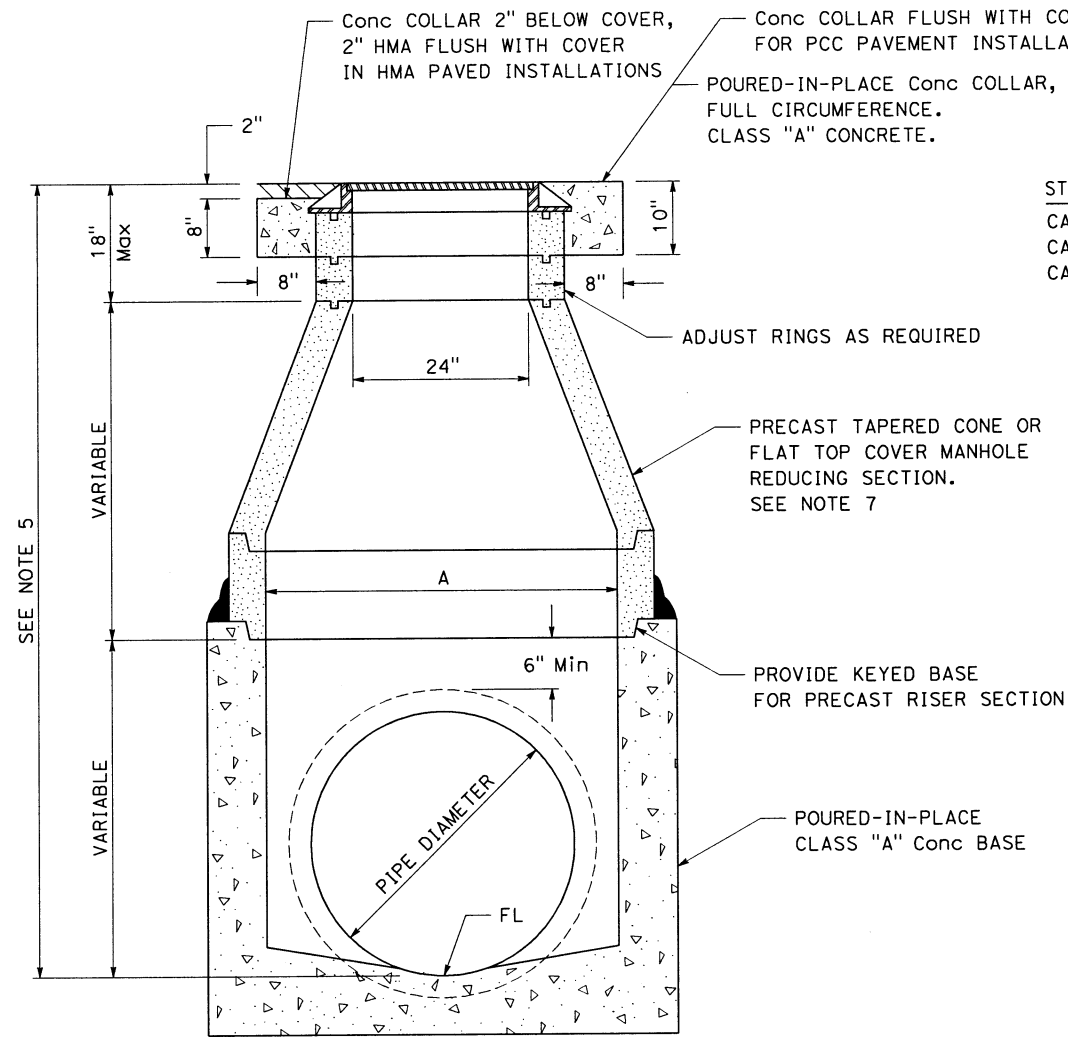
DRAINAGE PLAN

SCALE: 1" = 50'

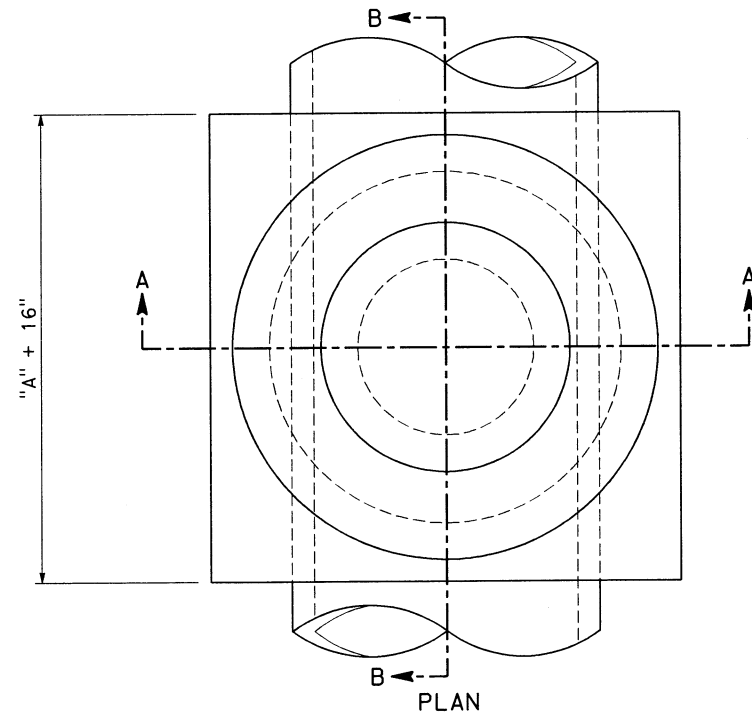
D-2





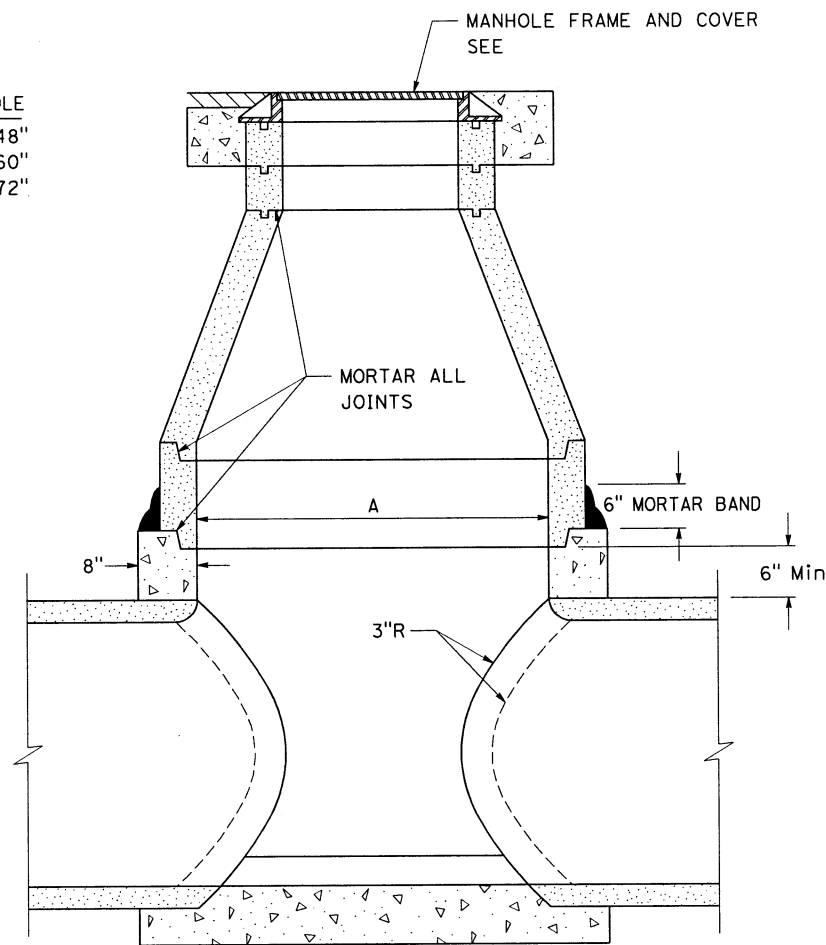


SECTION A-A



PLAN

STANDARD MANHOLE	
CASE I	A=48"
CASE II	A=60"
CASE III	A=72"



SECTION B-B

NOTES:

1. PRECAST PIPE, ADJUSTING RINGS AND TAPERED OR FLAT TOP SECTIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH A.S.T.M. C-478, USING TYPE II CEMENT.
2. THE JOINT BETWEEN THE PRECAST RISER AND POURED-IN-PLACE CONCRETE RISER AND BASE, AND ALL JOINTS BETWEEN PRECAST SECTIONS INCLUDING GRADE RINGS SHALL BE MORTARED.
3. PROVIDE 6" MORTAR BAND AROUND EXTERIOR OF RISER-TO-BASE JOINT.
4. INTERIOR OF THE MANHOLE SHALL HAVE A SMOOTH TROWLED SURFACE.
5. IF THE DISTANCE BETWEEN THE FLOWLINE OF THE MANHOLE AND THE FINISH GRADE OF THE LID IS GREATER THAN OR EQUAL TO 12 FEET, THE MANHOLE IS TO BE CONSTRUCTED WITH STEPS, AS SHOWN ON FRESNO METROPOLITAN FLOOD CONTROL DISTRICT STANDARD PLANS AND SPECIFICATIONS.
6. MANHOLES SHALL BE CONSTRUCTED PER SECTION 23 OF THE FMFCD STANDARD SPECIFICATIONS.
7. WHERE GATE VALVE OR STEPS ARE SHOWN ON THE PLANS TO BE INSTALLED, USE ECCENTRIC REDUCING SECTION PER FRESNO METROPOLITAN FLOOD CONTROL DISTRICT STANDARD PLANS AND SPECIFICATIONS.

TYPE "A" MANHOLE

DRAINAGE DETAILS
NO SCALE
DD-1

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Fre				

Gilberto Baca

REGISTERED CIVIL ENGINEER

5/29/12

DATE

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS
OR AGENTS SHALL NOT BE RESPONSIBLE FOR
THE ACCURACY OR COMPLETENESS OF SCANNED
COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER

GILBERTO BACA

No. 63140

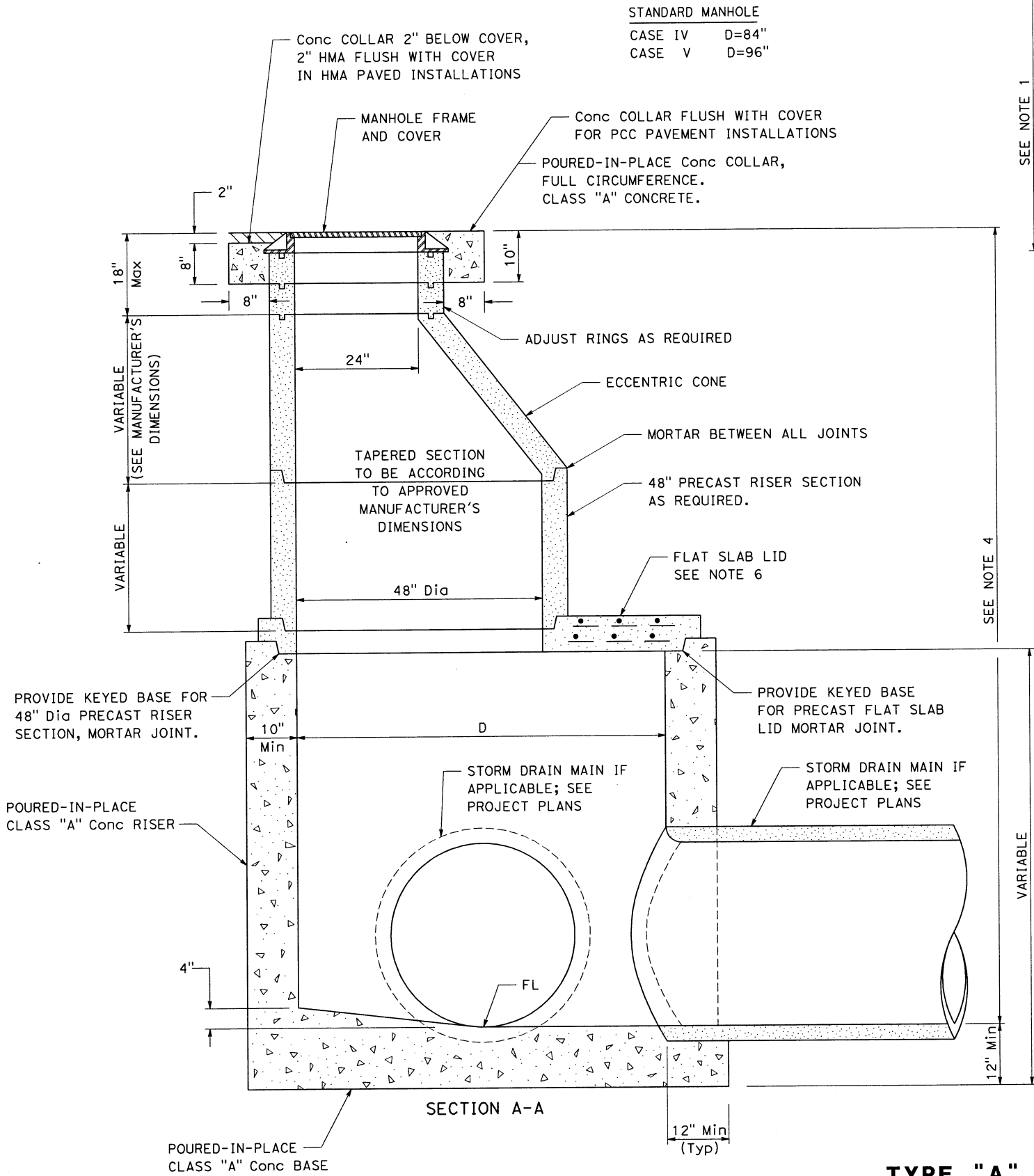
Exp. 6/30/12

CIVIL

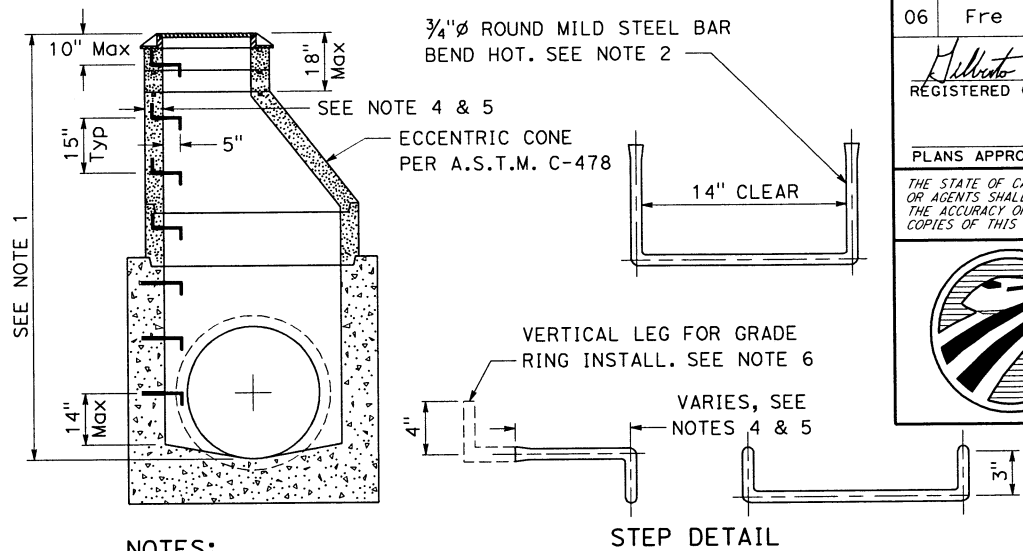
STATE OF CALIFORNIA

CALIFORNIA

HIGH-SPEED RAIL AUTHORITY



TYPE "A" MANHOLE



NOTES:

- USE MANHOLE WITH STEPS WHEN DISTANCE BETWEEN FINISH SURFACE AND FLOW LINE IS 12 FEET OR GREATER.
- STEEL BAR FOR STEPS SHALL CONFORM TO A.S.T.M. A108-07 AND GALVANIZED PER A.S.T.M. A123/A123M-09 AFTER HOT BENDING. OTHER CORROSION-PROOFING COATINGS MAY BE APPROVED BY THE ENGINEER.
- STEPS SHALL BE SLIP RESISTANT, USING AN APPROVED COATING, ETCHING, GROOVING, OR OTHER METHOD APPROVED BY THE ENGINEER.
- MINIMUM STEP IMBEDMENT SHALL BE 6 INCHES, FIRMLY AND RIGIDLY SET WITH EPOXY GROUT OR EPOXY. EXCEPTION: SEE NOTE 5.
- WHERE THE WALL THICKNESS OF ANY ELEMENT OF THE MANHOLE WILL NOT PERMIT AT LEAST 6 INCHES OF STEP IMBEDMENT, APPROVED ANCHORING DEVICES SHALL BE USED WHICH PROVIDE A MINIMUM 3 INCHES IMBEDMENT AND MEET THE MINIMUM DESIGN LOAD REQUIREMENTS OF SECTION 3277(C) OF TITLE 8, CALIFORNIA CODE OF REGULATIONS. THE MINIMUM DESIGN LOAD SHALL BE A SINGLE CONCENTRATED LOAD OF 300 LBS.
- WHERE STEP IS LOCATED WITHIN GRADE RING AREA, USE GRADE RINGS GROOVED FOR STEP PLACEMENT BETWEEN RINGS. STEP SHALL HAVE VERTICAL ANCHOR LEGS BEHIND THE RING.
- ORIENT MANHOLE SO THAT STEPS ARE IN THE WALL WITHOUT PIPES, OR WALL WITH THE LEAST DIAMETER PIPE. MAINTAIN CONTINUOUS VERTICAL STEP ALIGNMENT.

TYPE "A" MANHOLE WITH STEPS

NOTES:

- PRECAST PIPE, ADJUSTING RINGS AND TAPERED OR FLAT TOP SECTIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH A.S.T.M. C-478, USING TYPE II CEMENT.
- ALL JOINTS SHALL BE MORTARED.
- INTERIOR OF THE MANHOLE SHALL HAVE A SMOOTH TROWLED SURFACE.
- IF THE DISTANCE BETWEEN THE FLOW LINE OF THE MANHOLE AND THE FINISH GRADE OF THE LID IS GREATER THAN OR EQUAL TO 12 FEET, THE MANHOLE IS TO BE CONSTRUCTED WITH STEPS, AS SHOWN ON FRESNO METROPOLITAN FLOOD CONTROL DISTRICT STANDARD PLANS AND SPECIFICATIONS.
- MANHOLES SHALL BE CONSTRUCTED PER SECTION 23 OF THE FMFCD STANDARD SPECIFICATIONS.
- FLAT SLAB LIDS SHALL BE DESIGNED FOR HS20-44 LOADING. CALCULATIONS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO FABRICATION.
- CONTRACTOR SHALL EMPLOY ALL MEASURES NECESSARY TO ENSURE THAT THE MINIMUM COMPACTION REQUIREMENTS ARE MET FOR ALL BACKFILL ASSOCIATED WITH THE MANHOLE CONSTRUCTION.


DRAINAGE DETAILS

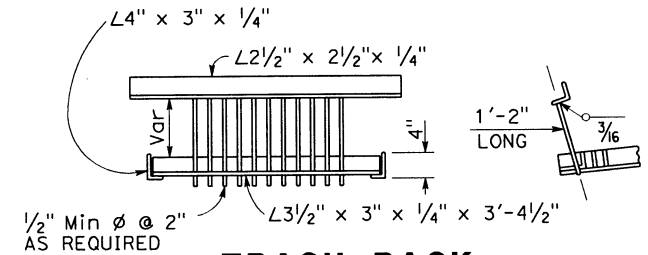
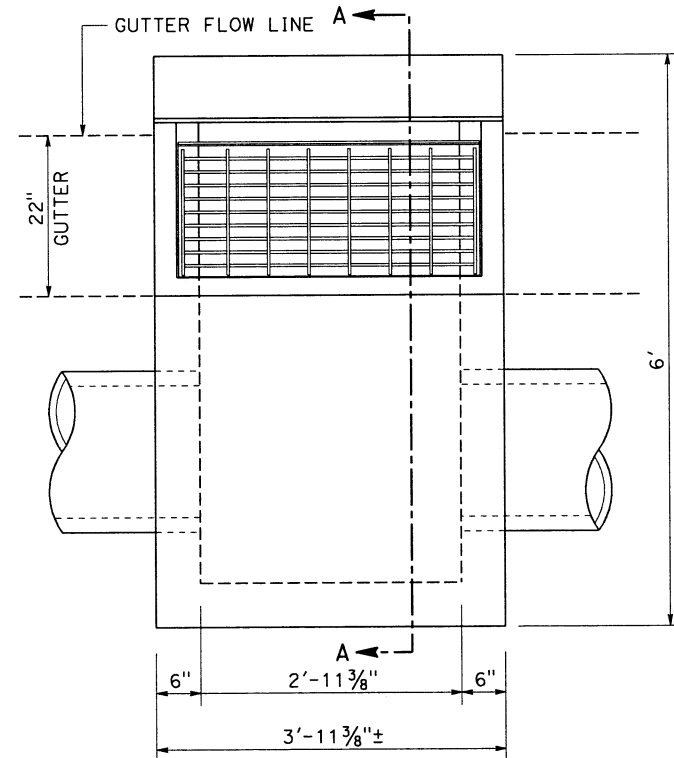
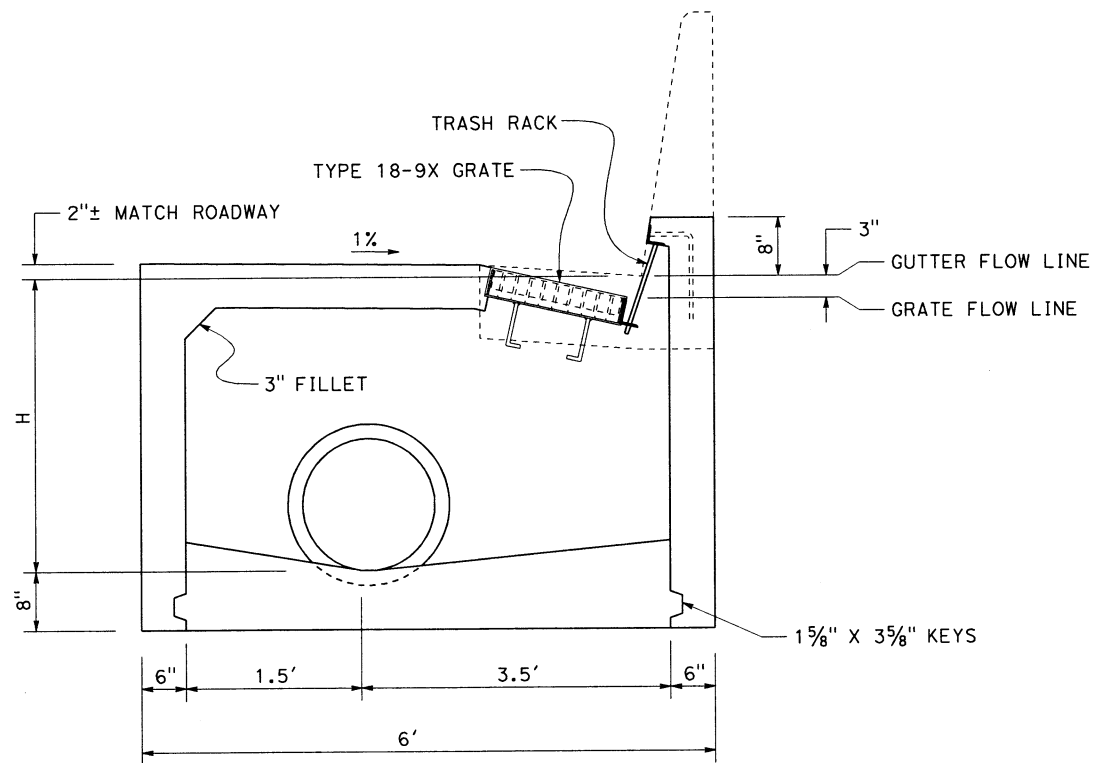
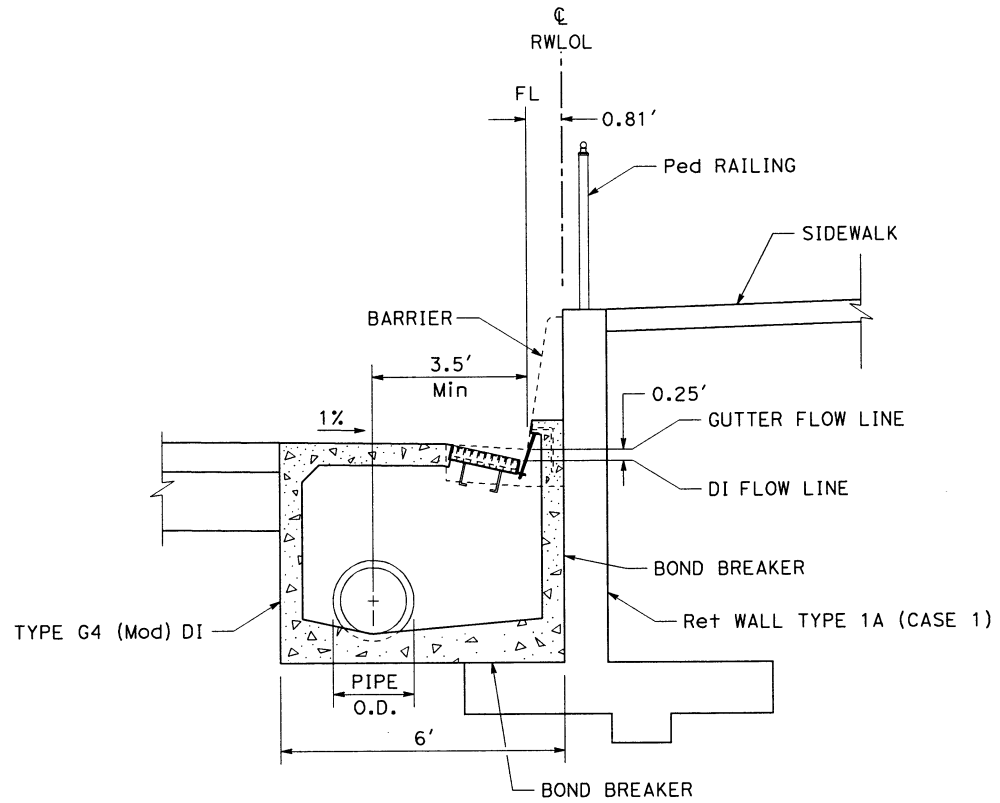
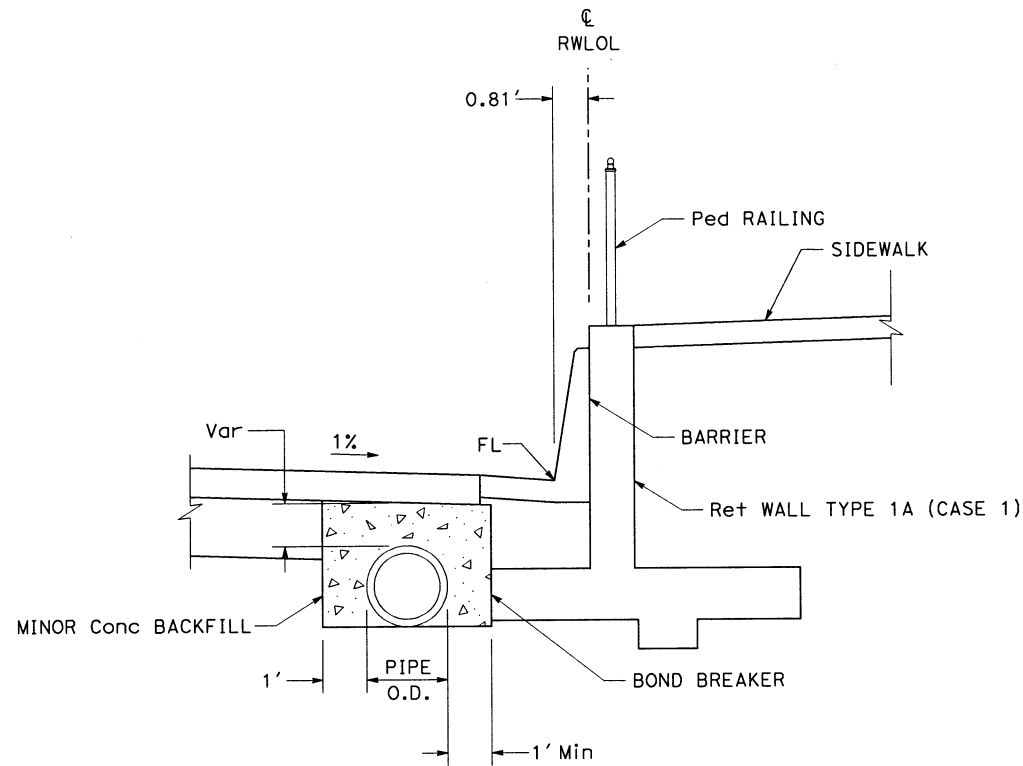
NO SCALE DD-2

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Fre				

5/29/12
 REGISTERED CIVIL ENGINEER DATE
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

GILBERTO BACA
 No. 63140
 Exp 6/30/12
 CIVIL
 STATE OF CALIFORNIA


CALIFORNIA
 HIGH-SPEED RAIL AUTHORITY



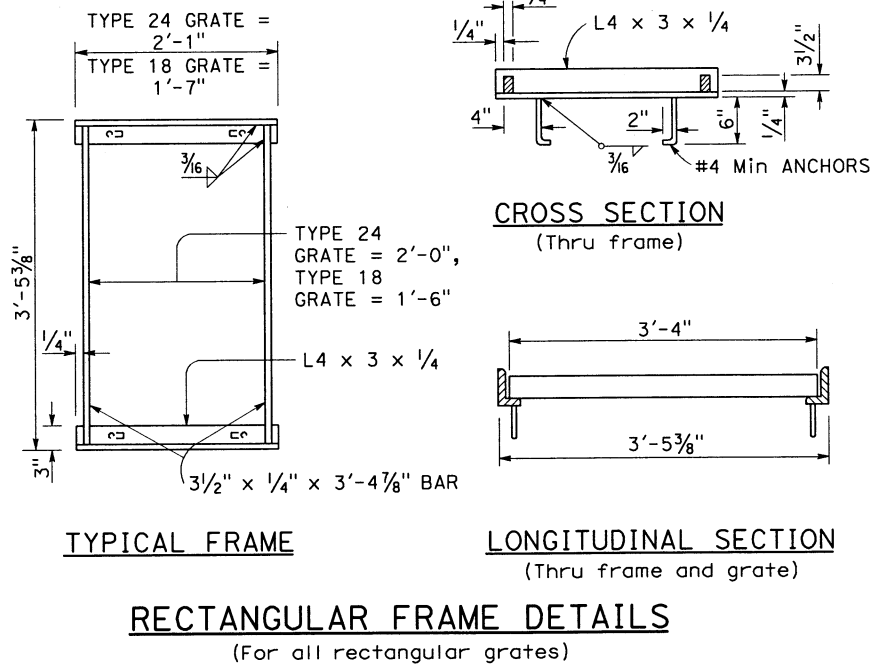
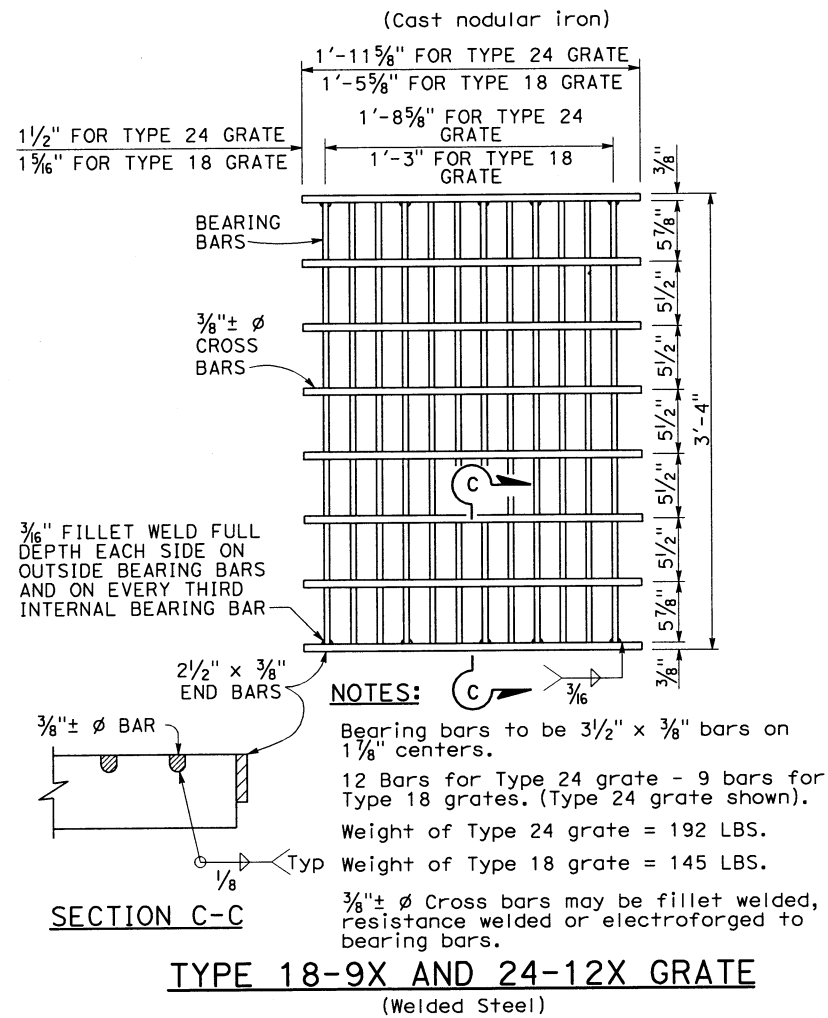
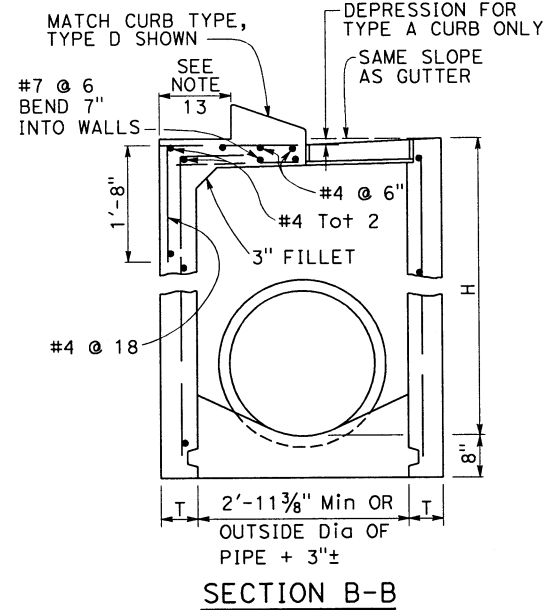
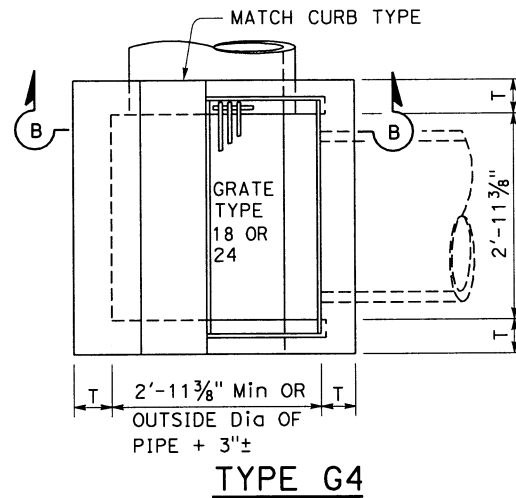
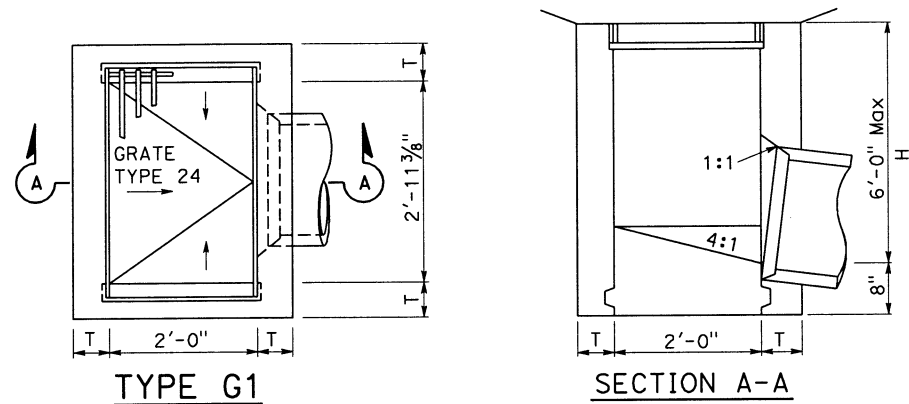
TRASH RACK
(FOR USE WITH PUMP INSTALLATION)

SECTION A-A

PLAN

TYPE G0 MODIFIED INLET

DRAINAGE DETAILS
NO SCALE **DD-4**



CONCRETE QUANTITIES TABLE

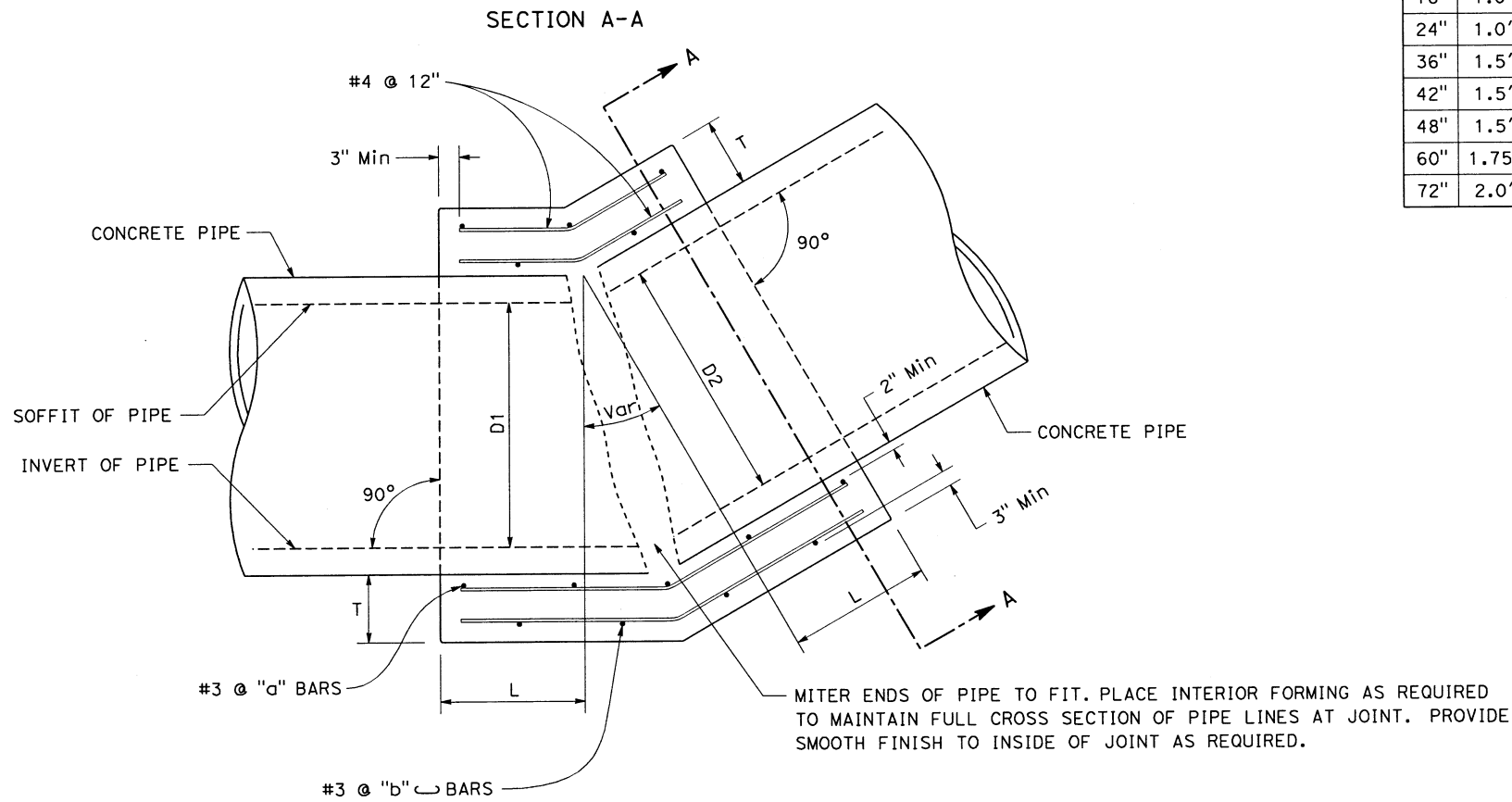
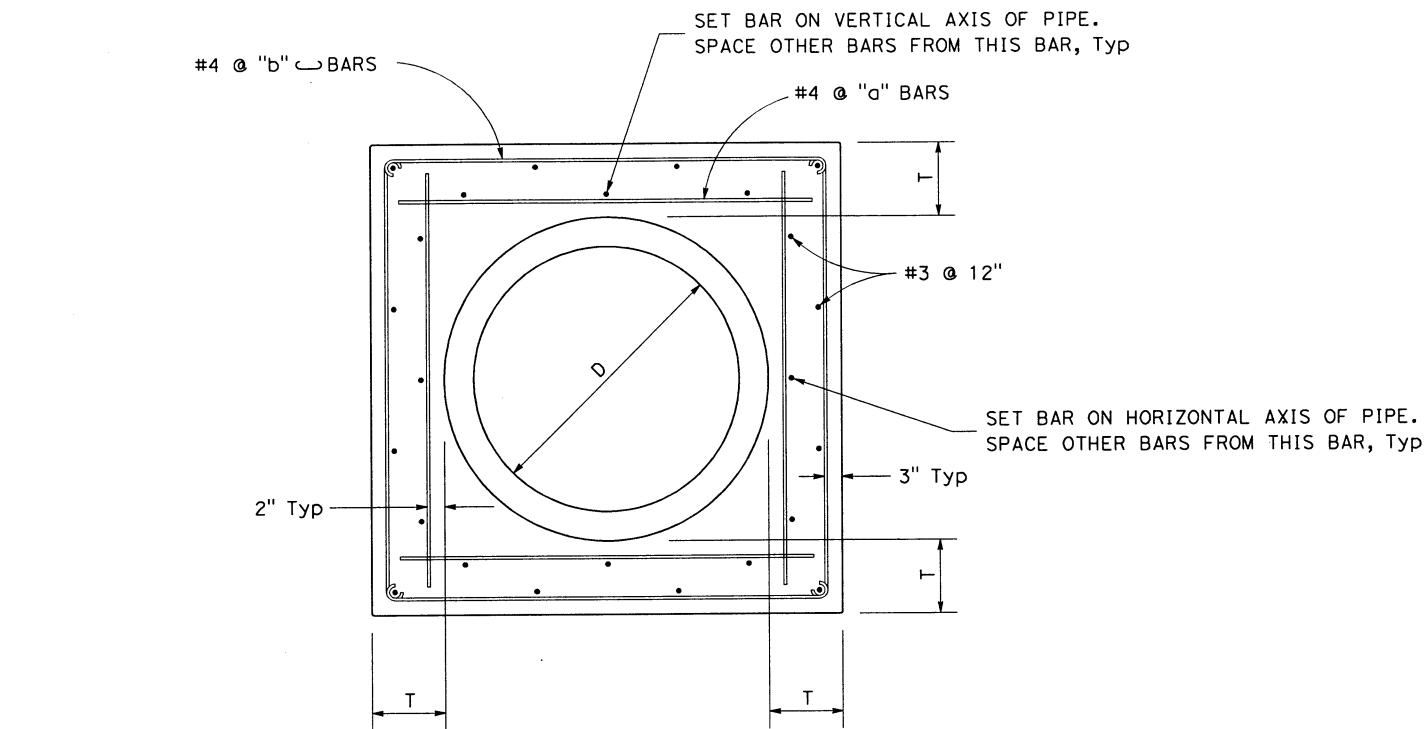
TYPE	H=36" TO 96" (T=6")		H=97" TO 20' (T=8")	
	H=36" (CY)	ADDITIONAL PCC PER FT (CY)	H=97" (CY)	ADDITIONAL PCC PER FT (CY)
G1	0.95	0.220	**	**
G-4* (TYPE 24)	1.27	0.255	3.48	0.357
G-4* (TYPE 18)	1.30	0.255	3.50	0.357

TABLE BASED ON 8" FLOOR SLAB. NO DEDUCTIONS ARE TO BE MADE TO THESE QUANTITIES BECAUSE OF PIPE OPENINGS, DIFFERENT FLOOR ALTERNATIVES OR DIFFERENT CURB TYPES. * QUANTITIES FOR TYPE G-4 INLETS BASED ON THE MINIMUM INTERIOR DIMENSIONS. ** MAXIMUM ALLOWABLE HEIGHT FOR TYPE G-1 INLET IS 6'.

TYPE G1 AND G4 INLET

DRAINAGE DETAILS

NO SCALE DD-5



- NOTES:
- WHERE PIPE OF DIFFERENT DIAMETERS ARE JOINED WITH A CONCRETE COLLAR, "L" SHALL BE THAT OF THE LARGER PIPE. D=D1 OR D2 WHICHEVER IS GREATER.
 - JOIN PIPES AT INVERTS WHERE THE SLOPE OF THE DOWNSTREAM PIPE IS GREATER THAN THE SLOPE OF THE UPSTREAM PIPE. JOIN PIPES AT SOFFIT WHERE THE SLOPE OF THE UPSTREAM PIPE IS GREATER THAN THE SLOPE OF THE DOWNSTREAM PIPE.
 - "b" BARS TO BE LOCKED AROUND LONGITUDINAL REINFORCEMENT. ROTATE BARS AS NECESSARY.
 - CONCRETE COLLAR SHOWN IS ADEQUATE FOR UP TO 40 FT OF FILL AND PIPE DIAMETERS LESS THAN 6 FT.
 - FOR PIPE SIZE NOT LISTED USE NEXT LARGER.

D	L	T	"a"	"b"
12"	1.0'	4"	@12"	@12"
18"	1.0'	5"	@12"	@12"
24"	1.0'	6"	@12"	@12"
36"	1.5'	10"	@12"	@12"
42"	1.5'	10"	@12"	@12"
48"	1.5'	10"	@12"	@12"
60"	1.75'	11"	@12"	@12"
72"	2.0'	12"	@6"	@6"

Dist

COUNTY

ROUTE

POST MILES
TOTAL PROJECT

SHEET
No.

TOTAL
SHEETS

06

Fre

Gilberto Baca

5/29/12

REGISTERED CIVIL ENGINEER

DATE

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS
OR AGENTS SHALL NOT BE RESPONSIBLE FOR
THE ACCURACY OR COMPLETENESS OF SCANNED
COPIES OF THIS PLAN SHEET.

GILBERTO
BACA

No. 63140

Exp. 6/30/12

CIVIL

STATE OF CALIFORNIA

CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

x


x

x

x

x

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION		DESIGN DIVISION		FUNCTIONAL SUPERVISOR		CALCULATED-DESIGNED BY		CHECKED BY		ALEJANDRO CORREA		REVISED BY	
Caltrans		DESIGN DIVISION		ROBERTO BANDA						GILBERTO BACA		DATE REVISED	

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Fre				
5/29/12			DATE		
REGISTERED CIVIL ENGINEER			GILBERTO BACA No. 63140 Exp. 6/30/12 CIVIL STATE OF CALIFORNIA		
PLANS APPROVAL DATE					
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.					
					

DRAINAGE PLAN SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT No.	INLET	DESIGN HEIGHT "H"	(N)	MINOR Conc (MINOR Str)	Misc IRON & STEEL	(N)	PLACE HMA (MISC AREA)	MINOR CONCRETE (BACKFILL)	FRAME & GRATE				MANHOLE			REINFORCED CONCRETE PIPE			CONCRETE (CONCRETE APRON)	REMOVE INLET	REMOVE FRAME & GRATE	REMOVE RCP	REMOVE MANHOLE	DESCRIPTION	STATION	DRAINAGE UNIT No.	DRAINAGE SYSTEM No.	DRAINAGE PLAN SHEET No.	
											TYPE D	18-9X	24-12X	TRASH RACK	TYPE A (CASE I)	TYPE A (CASE IV)	FRAME & COVER	18"	24"	60"											
			TYPE	FT	CY	LB	SQYD	CY	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA						EA
D-1	1	a						70											252.9							24" RCP		a	1	D-1	
		b		6.9										1		1										TYPE A MANHOLE (CASE I)	"GST" 31+00.00, Lt 2.00'	b			
		c																	25.7							24" RCP		c			
		d	D	6.0	2.20	168					1										0.2					TYPE D DI	"GST" 31+00.00, Lt 27.67'	d			
		e																	51.4							24" RCP		e			
		f	D	5.7	2.13	168					1										0.2					TYPE D DI	"GST" 31+00.00, Rt 50.72'	f			
D-1	2	a	D	6.1	2.22	168					1										0.2					TYPE D DI	"GST" 36+41.43, Lt 29.00'	a	2	D-1	
		b																	33.7							24" RCP		b			
		c		6.9										1		1										TYPE A MANHOLE (CASE I)	"GST" 36+41.43, Rt 6.00'	c			
		d																	21.7							24" RCP		d			
		e	D	6.1	2.22	168					1										0.2					TYPE D DI	"GST" 36+41.43, Rt 29.00'	e			
		f					50												184.9							24" RCP		f			
		g		7.8										1		1										TYPE A MANHOLE (CASE I)	"GST" 38+30.24, Rt 6.00'	g			
		h					26												55.7							24" RCP		h			
		i		7.4										1		1										TYPE A MANHOLE (CASE I)	"MA" 23+12.71, Lt 6.00'	i			
		j					160												18.1							24" RCP		j			
		k	D	7.0	2.44	168					1										0.2					TYPE D DI	"MA" 22+53.00, Lt 25.36'	k			
		l																	30.7							24" RCP		l			
		m	D	7.0	2.44	168					1										0.2					TYPE D DI	"MA" 22+53.00, Rt 26.03'	m			
		n																	347.5							24" RCP		n			
		o		15.4													1	1								TYPE A MANHOLE (CASE IV)	"MA" 19+00.00, Lt 6.00'	o			
D-1	3	a		4.3										1		1										TYPE A MANHOLE (CASE I)	"FFS" 11+98.50, Rt 26.66'	a	3	D-1	
		b																	47.0							18" RCP		b			
		c	G1	5.9	1.59	239							1								1.5					TYPE G1 DI, 24-12X GRATE	"FFS" 11+98.50, Rt 76.65'	c			
D-2	4	a	GO	3.4	2.06	187						1		1							0.2					TYPE GO (Mod) DI, 18-9X GRATE	"FFS" 15+05.00, Lt 34.00'	a	4	D-2	
		b						2.2											19.6							18" RCP		b			
		c	GO	3.3	2.03	187						1		1							0.2					TYPE GO (Mod) DI, 18-9X GRATE	"FFS" 15+27.17, Lt 35.42'	c			
		d						7.3											45.1							18" RCP		d			
		e	GO	4.1	2.30	187						1		1							0.2					TYPE GO (Mod) DI, 18-9X GRATE	"FFS" 15+75.00, Lt 40.26'	e			
		f						2.4											118.2							18" RCP		f			
		g	GO	6.0	2.43	187						1		1							0.2					TYPE GO (Mod) DI, 18-9X GRATE	"FFS" 16+97.80, Lt 48.31'	g			
		h																	20.2							24" RCP		h			
		i	G4	6.9	3.23	187						1		1							0.2					TYPE G4 DI, 18-9X GRATE	"FFS" 17+10.38, Lt 21.59'	i			
		j																	114.8							60" RCP		j			
SHEET TOTAL						27.29	2182	306	11.9	6	5	1	5	5	1	6	229.9	1036.5	114.8		3.7	0	0	0	0						

(N) NOT A SEPERATE PAY ITEM, FOR INFORMATION ONLY.

DRAINAGE QUANTITIES

DQ-1

Dist

COUNTY

ROUTE

POST MILES
TOTAL PROJECT

SHEET
No.

TOTAL
SHEETS

06

Fre

Gilberto Baca

REGISTERED CIVIL ENGINEER

5/29/12

DATE

REGISTERED PROFESSIONAL ENGINEER

GILBERTO BACA

No. 63140


Exp. 6/30/12

CIVIL

STATE OF CALIFORNIA

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS
OR AGENTS SHALL NOT BE RESPONSIBLE FOR
THE ACCURACY OR COMPLETENESS OF SCANNED
COPIES OF THIS PLAN SHEET.



CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

DRAINAGE PLAN SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT No.	INLET	DESIGN HEIGHT "H" (N)	MINOR Conc (MINOR Str)	Misc IRON & STEEL	(N)	PLACE HMA (Misc AREA)	MINOR CONCRETE (BACKFILL)	FRAME & GRATE				MANHOLE			REINFORCED CONCRETE PIPE			CONCRETE (CONCRETE APRON)	REMOVE INLET	REMOVE FRAME & GRATE	REMOVE CULVERT	REMOVE MANHOLE	DESCRIPTION	STATION	DRAINAGE UNIT No.	DRAINAGE SYSTEM No.	DRAINAGE PLAN SHEET No.	
										TYPE D	18-9X	24-12X	TRASH RACK	TYPE A (CASE I)	TYPE A (CASE IV)	FRAME & COVER	18"	24"	60"											
																														EA
D-2	5	a	GO	3.3	2.06	187				EA	EA	EA	EA							0.2					TYPE GO (Mod) DI, 18-9X GRATE	"FFS" 15+05.00, R+ 34.00'	a	5	D-2	
		b						2.2												19.3					18" RCP		b			
		c	GO	3.3	2.06	187														0.2					TYPE GO (Mod) DI, 18-9X GRATE	"FFS" 15+27.17, R+ 34.00'	c			
		d						7.3												45.1					18" RCP		d			
		e	GO	4.0	2.30	187														0.2					TYPE GO (Mod) DI, 18-9X GRATE	"FFS" 15+75.00, R+ 35.27'	e			
		f						2.0												124.8					18" RCP		f			
		g	GO	6.4	3.70	187														0.2					TYPE GO (Mod) DI, 18-9X GRATE	"FFS" 17+00.00, R+ 44.32'	g			
		h																							24" RCP		h			
		i																							INSTALL TRASH RACK to Exist DI	"FFS" 17+55.58, R+ 20.07'	i			
D-1	1X	a																			1	1			REMOVE INLET	"GST" 31+78.35, R+ 73.33'	a	1X	D-1	
		b																					32		REMOVE RCP		b			
		c																			1	1			REMOVE INLET	"GST" 31+57.39, R+ 50.92'	c			
		d																					235		REMOVE RCP		d			
D-1	2X	a																			1	1			REMOVE INLET	"FFS" 11+49.17, L+ 69.51'	a	2X	D-1	
		b																					26		REMOVE RCP		b			
		c																			1	1			REMOVE INLET	"FFS" 11+42.23, L+ 43.84'	c			
		d																					78		REMOVE RCP		d			
		e																			1	1			REMOVE INLET	"FFS" 12+14.30, L+ 45.74'	e			
		f																					80		REMOVE RCP		f			
D-1	3X	a																					174		REMOVE RCP		a	3X	D-1	
		b																			1	1			REMOVE INLET	"FFS" 12+55.90, R+ 37.80'	b			
		c																					58		REMOVE RCP		c			
		d																			1	1			REMOVE INLET	"GST" 34+43.34, R+ 30.15'	d			
		e																					110		REMOVE RCP		e			
		f																			1	1			REMOVE INLET	"GST" 35+29.98, L+ 28.50'	f			
		g																					1		REMOVE MANHOLE	"GST" 33+86.81, R+ 32.53'	g			
D-1	4X	a																			1	1			REMOVE INLET	"MA" 22+53.00, R+ 26.23'	a	4X	D-1	
D-2	5X	a																			1	1			REMOVE INLET	"FFS" 16+94.08, L+ 51.67'	a	5X	D-2	
		b																					35		REMOVE RCP		b			
		c																			1	1			REMOVE INLET	"FFS" 17+08.26, L+ 21.49'	c			
		d																					122		REMOVE RCP		d			
D-2	6X	a																			1	1			REMOVE INLET	"FFS" 16+38.80, R+ 42.48'	a	6X	D-2	
		b																					100		REMOVE RCP		b			
SHEET TOTAL					10.10	748	0	11.5	0	4	0	5	0	0	0	189.2	59.1	0.0	0.8	12	12	1050	1							
SHEET TOTAL DQ-1					27.29	2182	306	11.9	6	5	1	5	5	1	6	229.9	1036.5	114.8	3.7	0	0	0	0							
TOTAL					37.39	2930	306	23.4	6	9	1	10	5	1	6	419.1	1095.6	114.8	4.5	12	12	1050	0							

(N) NOT A SEPERATE PAY ITEM, FOR INFORMATION ONLY.

DRAINAGE QUANTITIES
DQ-2

NOTES:

1. UTILITIES TO BE VERIFIED BY OTHERS PRIOR TO CONSTRUCTION
2. UTILITIES IN CONFLICT TO BE RELOCATED BY OTHERS.
3. HIGH RISK UTILITIES TO BE LOCATED BY POTHOLE PRIOR TO ANY EXCAVATION.

UTILITY INFORMATION				
No.	FACILITY	SIZE	OWNER	DISPOSITION
①	SEWER	18"	CITY OF FRESNO	
②	FIBER OPTIC	6-1/2"	CITY OF FRESNO	
③	WATER	12"	CITY OF FRESNO	
④	GAS	UNKNOWN	PG&E	
⑤	WATER	12"	CITY OF FRESNO	
⑥	WATER	8"	CITY OF FRESNO	
⑦	TELEVISION	N/A	UNKNOWN	
⑧	GAS	UNKNOWN	PG&E	
⑨	SEWER	10"	CITY OF FRESNO	
⑩	POWER	22 KV	PG&E	

UTILITY INFORMATION				
No.	FACILITY	SIZE	OWNER	DISPOSITION
⑪	OH TELECOM	N/A	UNKNOWN	
⑫	OH POWER	UNKNOWN	PG&E	
⑬	SEWER	8"	CITY OF FRESNO	
⑭	COPPER SYNCH	2"	CITY OF FRESNO	
⑮	FIBER OPTIC	4"	VERIZON/MCI	

Dist

COUNTY

ROUTE

POST MILES

TOTAL PROJECT

SHEET No.

TOTAL SHEETS

06


Fre

REGISTERED CIVIL ENGINEER

DATE

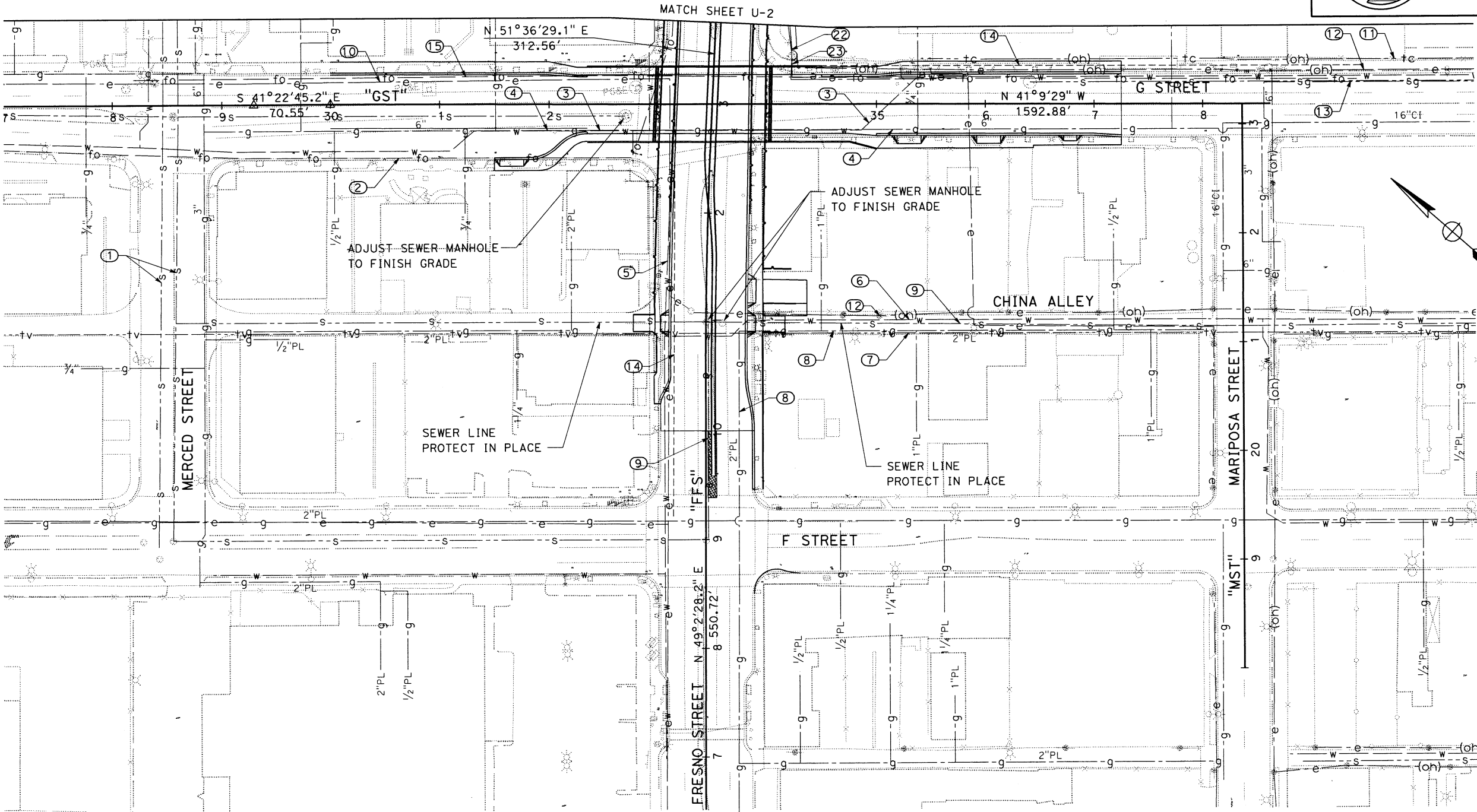
PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



CALIFORNIA

HIGH-SPEED RAIL AUTHORITY



UTILITY PLAN

SCALE: 1" = 50' U-1

UTILITY INFORMATION				
No.	FACILITY	SIZE	OWNER	DISPOSITION
16	OH TELECOM	UNKNOWN	UPRR	
17	OIL (ABANDONED)	UNKNOWN	CHEVRON	
18	OH POWER	UNKNOWN	UPRR	
19	FIBER OPTIC	UNKNOWN	SPRINT	
20	FIBER OPTIC	UNKNOWN	QWEST	
21	OIL	UNKNOWN	KINDER MORGAN	
22	POWER	15 KV	PG&E	
23	POWER	15 KV	PG&E	

Dist

06

COUNTY

Fre

ROUTE

POST MILES

TOTAL PROJECT

SHEET No.

TOTAL SHEETS

REGISTERED CIVIL ENGINEER

DATE

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.


REGISTERED PROFESSIONAL ENGINEER

No.

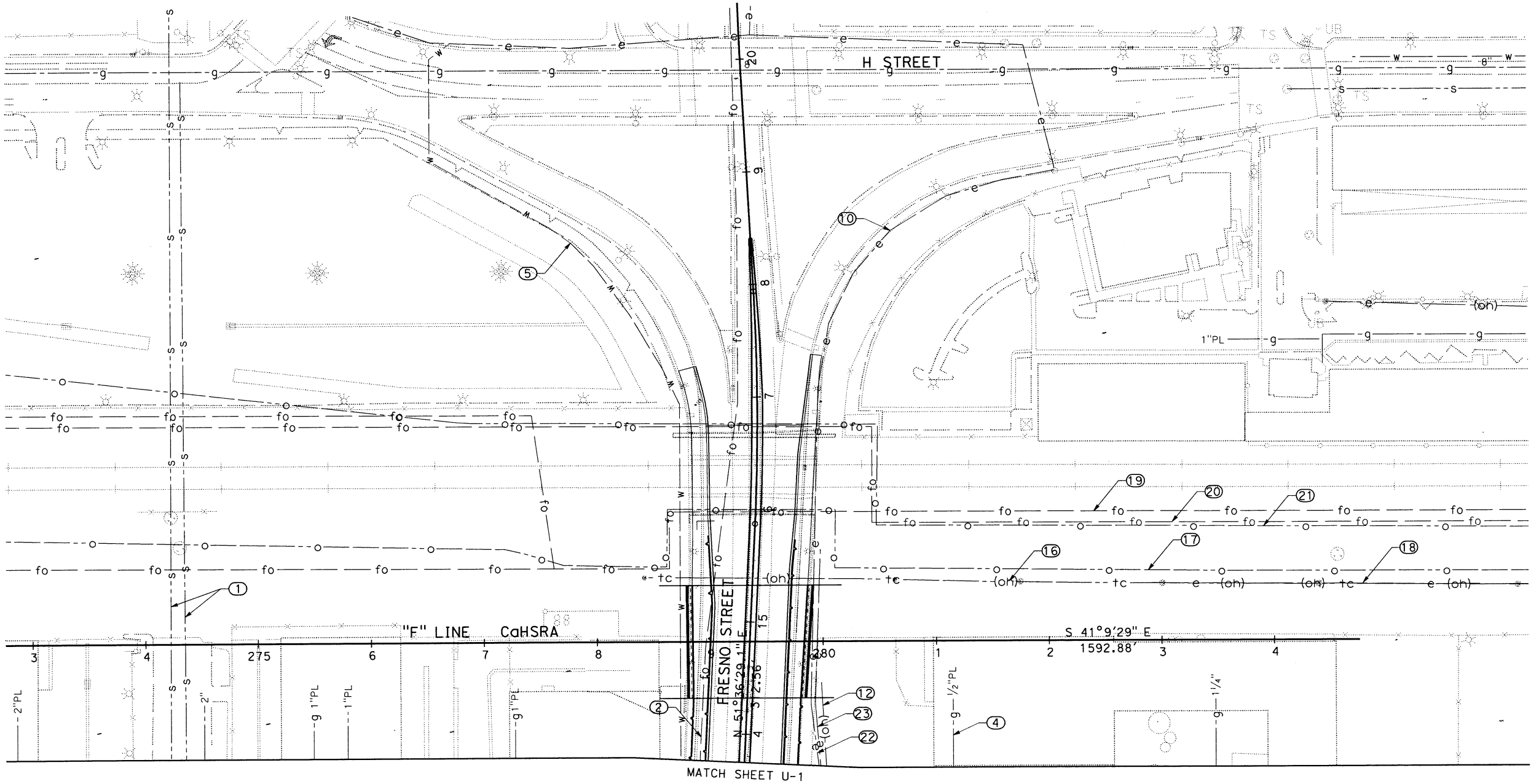
Exp.

CIVIL

STATE OF CALIFORNIA










CALIFORNIA
HIGH-SPEED RAIL AUTHORITY



UTILITY PLAN
SCALE: 1" = 50' U-2

LEGEND:

-  DIRECTION OF TRAFFIC FLOW
-  ROADSIDE SIGN PANEL ON EXISTING POST
-  CHANNELIZER
-  TYPE III BARRICADE
-  TYPE I BARRICADE
-  SIGN NUMBER
-  CONSTRUCTION AREA

NOTES:

1. FOR ADDITIONAL CONSTRUCTION AREA SIGNS, SEE DETOUR PLAN.
2. EXACT LOCATION OF SIGNS TO BE DETERMINED BY THE ENGINEER.
3. COVER ALL CONFLICTING SIGNS.

Dist	COUNTY	ROUTE	POST MILES	SHEET	TOTAL
06	Fre		TOTAL PROJECT	No.	SHEETS

ICW H Mm

5-29-12

REGISTERED CIVIL ENGINEER DATE

KEVIN H. MURAI

No. C 59586

Exp. 12/31/13


CIVIL

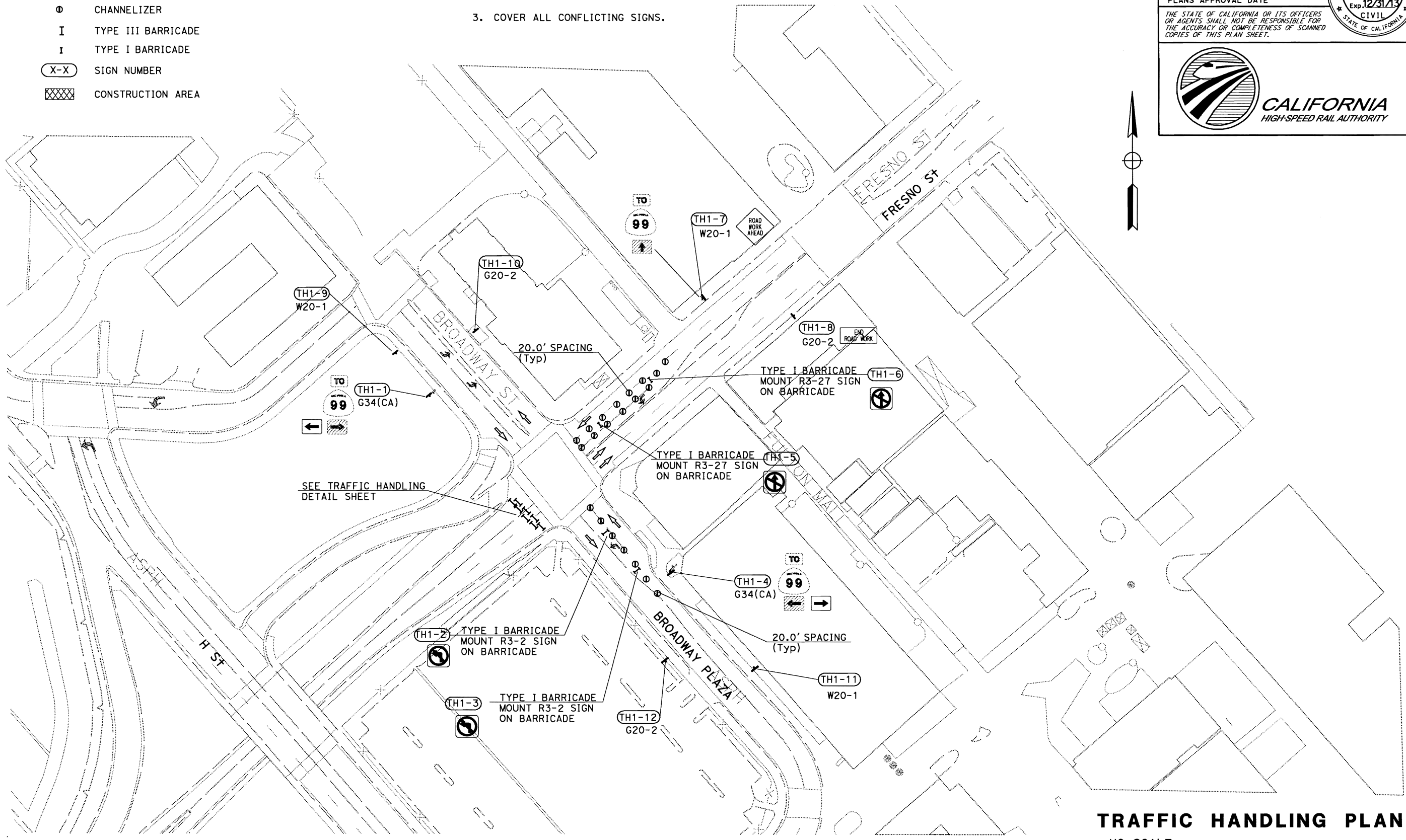
STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

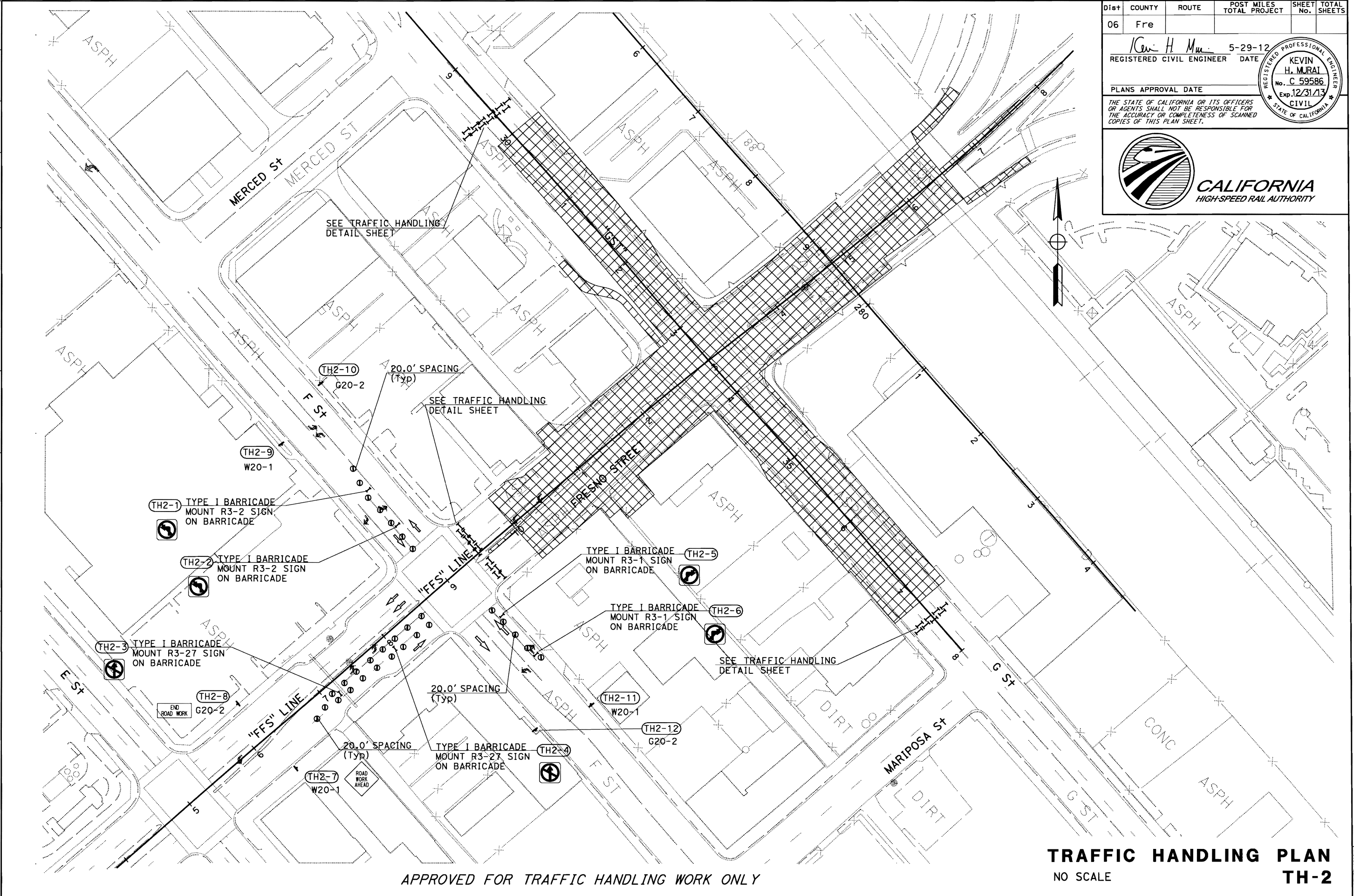


APPROVED FOR TRAFFIC HANDLING WORK ONLY

TRAFFIC HANDLING PLAN
NO SCALE
TH-1

LAST REVISION DATE PLOTTED => 29-MAY-2012
05-29-12 TIME PLOTTED => 14:19

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION		FUNCTIONAL SUPERVISOR		CALCULATED-DESIGNED BY		REVISOR	
Mohammed Oatami		Mohammed Oatami		Kevin Murai		Kevin Murai	
TRAFFIC DESIGN		CHECKED BY		Hassan Tahar		DATE REVISED	



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL No. SHEETS
06	Fre			

ICW H. Murai 5-29-12
REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER
KEVIN H. MURAI
No. C 59586
Exp. 12/31/13
CIVIL
STATE OF CALIFORNIA

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

LAST REVISION DATE PLOTTED => 29-MAY-2012
05-29-12 TIME PLOTTED => 14:19

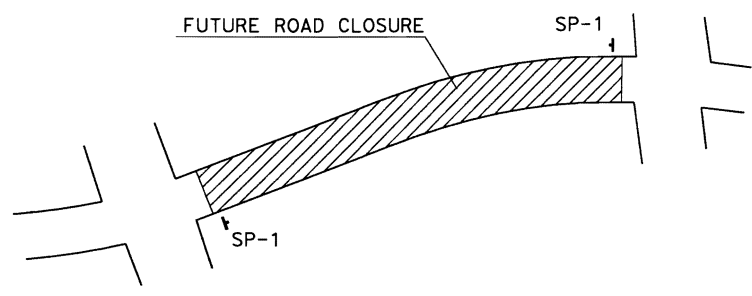
SPECIAL ADVANCE NOTICE PUBLICITY SIGN



SIGN SP-1

SIZE	BORDER	MARGIN	LETTER SIZE					CORNER RADIUS
	WIDTH	WIDTH	LINE 1	LINE 2*	LINE 3	LINE 4	LINE 5, 6 & 7	
48"x60"	1 1/4"	3/4"	4E	4D	6E			3"
42"x26"	OVERLAY					4D	3D	1 1/2"

- NOTES:
- SIGN SHALL HAVE ORANGE RETROREFLECTORIZED BACKGROUND WITH BLACK BORDER AND LETTERS.
 - BOLT HOLES SHALL BE 3/8 " DIAMETER.
 - BASE MATERIAL SHALL BE ALUMINUM (MINIMUM 0.06").
 - SIGN SHALL BE MOUNTED WITH THE BOTTOM OF SIGN A MINIMUM OF 6' ABOVE GROUND.
 - SIGN SHALL BE PLACED A MINIMUM 7 DAYS BEFORE TEMPORARY ROAD CLOSURE.

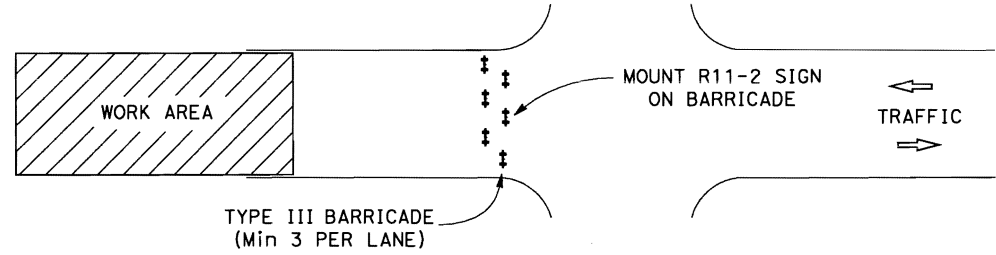


ADVANCE ROAD CLOSURE

SHEET No.	SP-1* SIGN	LOCATION
	EA	
DE-1	2	FRESNO STREET
	2	G STREET
TOTAL	4	

* SP-1 SIGN TO BE PLACED NEAR THE ENTRANCE OF THE ROAD CLOSURE.

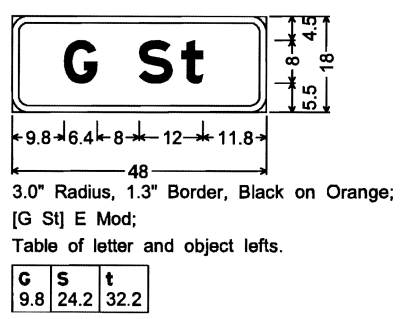
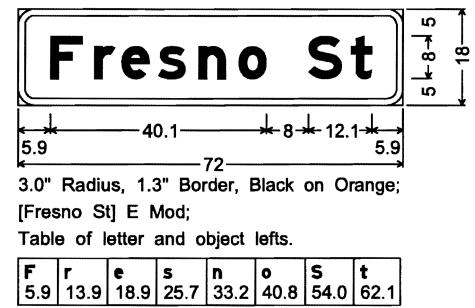
NOTE: FOR ADDITIONAL CONSTRUCTION AREA SIGNS REFER TO DETOUR PLAN AND TRAFFIC HANDLING QUANTITIES.



ROAD CLOSURE

SHEET NO.	LOCATION	DIRECTION	TYPE III BARRICADE	R11-2 SIGN
			EA	EA
DE-1	FRESNO STREET	SB	12	2
		NB	18	2
	H STREET	EB	3	1
		EB	3	1
	G STREET	EB	18	2
		WB	18	2
TOTAL			72	10

NOTE: FOR ADDITIONAL CONSTRUCTION AREA SIGNS REFER TO DETOUR PLAN AND TRAFFIC HANDLING QUANTITIES.




TRAFFIC HANDLING DETAILS AND QUANTITIES

NO SCALE

THD-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

TRAFFIC DESIGN

FUNCTIONAL SUPERVISOR

MOHAMMED OATAMI

CALCULATED/DESIGNED BY

CHECKED BY

KEVIN MURAI

HASSAN TAHA

REVISED BY

DATE REVISED

STATIONARY MOUNTED CONSTRUCTION AREA SIGNS
(TRAFFIC HANDLING)

SHEET No.	SIGN No.	SIGN CODE	SIGN MESSAGE	No. OF POST AND SIZE	PANEL SIZE	EACH	REMARK
DE-1	1-1	G7-1(CA)	FRESNO ST	1 - 4" x 6"	72" x 24"	8	
		M4-10(L)	DETOUR ARROW LEFT		48" x 18"		
	1-2	G7-1(CA)	FRESNO ST	1 - 4" x 6"	72" x 24"	5	
		M4-10(R)	DETOUR ARROW RIGHT		48" x 18"		
	1-3	G7-1(CA)	G ST	1 - 4" x 6"	72" x 24"	3	
		M4-10(L)	DETOUR ARROW LEFT		48" x 18"		
	1-4	G7-1(CA)	G ST	1 - 4" x 6"	72" x 24"	2	
		M4-10(R)	DETOUR ARROW RIGHT		48" x 18"		
	1-5	SC3(CA)	DETOUR W/ARROW	1 - 4" x 6"	48" x 18"	8	
	1-6	M4-8a	END DETOUR	1 - 4" x 4"	24" x 18"	3	
TH-1	1-7	R11-4	ROAD CLOSED TO THRU TRAFFIC		60" x 30"	1	MOUNTED ON BARRICADE
	TH1-1	G34(CA)	DIRECTIONAL ARROW		21" x 15"	1	MOUNTED ON EXISTING POST
	TH1-2	R3-2	NO LEFT TURN SYMBOL		24" x 24"	1	MOUNTED ON BARRICADE
	TH1-3	R3-2	NO LEFT TURN SYMBOL		24" x 24"	1	MOUNTED ON BARRICADE
	TH1-4	G34(CA)	DIRECTIONAL ARROW		21" x 15"	1	MOUNTED ON EXISTING POST
	TH1-5	R3-27	NO STRAIGHT THROUGH SYMBOL		24" x 24"	1	MOUNTED ON BARRICADE
	TH1-6	R3-27	NO STRAIGHT THROUGH SYMBOL		24" x 24"	1	MOUNTED ON BARRICADE
	TH1-7	W20-1	ROAD WORK AHEAD	1 - 4" x 4"	36" x 36"	1	
	TH1-8	G20-2	END ROAD WORK	1 - 4" x 4"	36" x 18"	1	
	TH1-9	W20-1	ROAD WORK AHEAD	1 - 4" x 4"	36" x 36"	1	
	TH1-10	G20-2	END ROAD WORK	1 - 4" x 4"	36" x 18"	1	
	TH1-11	W20-1	ROAD WORK AHEAD	1 - 4" x 4"	36" x 36"	1	
TH-2	TH1-12	G20-2	END ROAD WORK	1 - 4" x 4"	36" x 18"	1	
	TH2-1	R3-2	NO LEFT TURN SYMBOL		24" x 24"	1	MOUNTED ON BARRICADE
	TH2-2	R3-2	NO LEFT TURN SYMBOL		24" x 24"	1	MOUNTED ON BARRICADE
	TH2-3	R3-27	NO STRAIGHT THROUGH SYMBOL		24" x 24"	1	MOUNTED ON BARRICADE
	TH2-4	R3-27	NO STRAIGHT THROUGH SYMBOL		24" x 24"	1	MOUNTED ON BARRICADE
	TH2-5	R3-1	NO RIGHT TURN SYMBOL		24" x 24"	1	MOUNTED ON BARRICADE
	TH2-6	R3-1	NO RIGHT TURN SYMBOL		24" x 24"	1	MOUNTED ON BARRICADE
	TH2-7	W20-1	ROAD WORK AHEAD	1 - 4" x 4"	36" x 36"		
	TH2-8	G20-2	END ROAD WORK	1 - 4" x 4"	36" x 18"		
	TH2-9	W20-1	ROAD WORK AHEAD	1 - 4" x 4"	36" x 36"		
	TH2-10	G20-2	END ROAD WORK	1 - 4" x 4"	36" x 18"		
	TH2-11	W20-1	ROAD WORK AHEAD	1 - 4" x 4"	36" x 36"		
	TH2-12	G20-2	END ROAD WORK	1 - 4" x 4"	36" x 18"		

NOTE: FOR ADDITIONAL CONSTRUCTION AREA SIGNS REFER TO DETOUR PLAN AND TRAFFIC HANDLING DETAILS.

CHANNELIZER
(SURFACE MOUNTED)

SHEET No.	EA
TH-1	21
TH-2	30
TOTAL	51

TYPE I
BARRICADE

SHEET No.	EA
TH-1	4
TH-2	6
TOTAL	10


Dist: 06COUNTY: FreROUTE: POST MILES TOTAL PROJECT: SHEET No.: TOTAL SHEETS:

ICW H Mm5-29-12
REGISTERED CIVIL ENGINEER DATE

KEVIN H. MURAI
No. C 59586
Exp. 12/31/13
CIVIL
STATE OF CALIFORNIA

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

TRAFFIC HANDLING QUANTITIES

THQ-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR		CALCULATED- DESIGNED BY	KEVIN MURAI	REVISED BY	
	MOHAMMED QATAMI					
	TRAFFIC DESIGN					
	HASSAN TAHA					
DATE		DATE		REVISED		

LEGEND:

- XX TRAFFIC STRIPE DETAIL No.
- DIRECTION OF TRAFFIC
- S1-1 ROADSIDE SIGN (WITH SHEET AND NUMBER)
- SS1-1 OVERHEAD SIGN STRUCTURE (WITH SHEET AND NUMBER)
- 1 METAL (ROADSIDE SIGN)
- 1 ROADSIDE SIGN (STRAP AND SADDLE BRACKET METHOD)
- REMOVE ROADSIDE SIGN (METAL POST)
- RESET ROADSIDE SIGN (METAL POST)
- ▲ RELOCATE ROADSIDE SIGN (STRAP AND SADDLE BRACKET METHOD)
- ▲▲ RELOCATE ROADSIDE SIGN (METAL POST)
- REMOVE ROADSIDE SIGN PANEL
- ROADSIDE SIGN (STRAP AND SADDLE BRACKET METHOD)
- * REMOVE SIGN STRUCTURE
- ↶ TYPE IV ARROW
- CHANGE OF STRIPE DETAIL

NOTES:

- FOR LIMITS OF TRAFFIC STRIPING, SEE PAVEMENT DELIENATION QUANTITIES.
- ROADSIDE SIGNS TO BE INSTALLED USING CITY OF FRESNO STANDARD PLAN P-88.
- ROADSIDE SIGNS RELOCATED FROM EXISTING SIGNAL MAST ARM AND POLES TO NEW SIGNAL ARE LUMPED SUM INTO THE INSTALLATION OF NEW SIGNAL.

Dist	COUNTY	ROUTE	POST MILES	SHEET	TOTAL
06	Fre		TOTAL PROJECT	No.	SHEETS

ICW H. Mura

5-29-12

REGISTERED CIVIL ENGINEER

DATE

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

KEVIN H. MURAI

No. C 59586

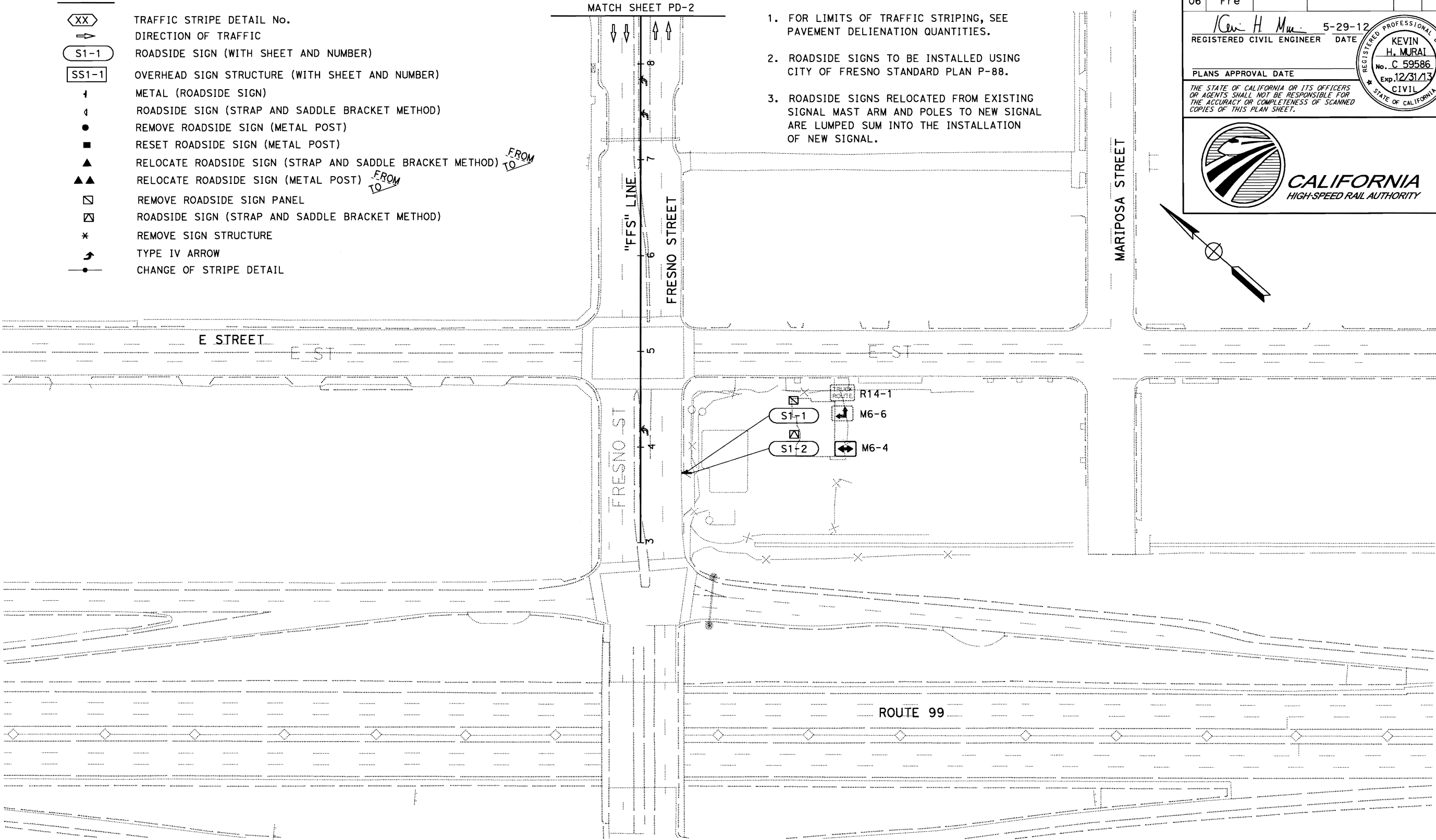
Exp. 12/31/13

CIVIL

STATE OF CALIFORNIA

CALIFORNIA

HIGH-SPEED RAIL AUTHORITY



PAVEMENT DELINEATION AND SIGN PLAN

SCALE: 1" = 50'

PD-1

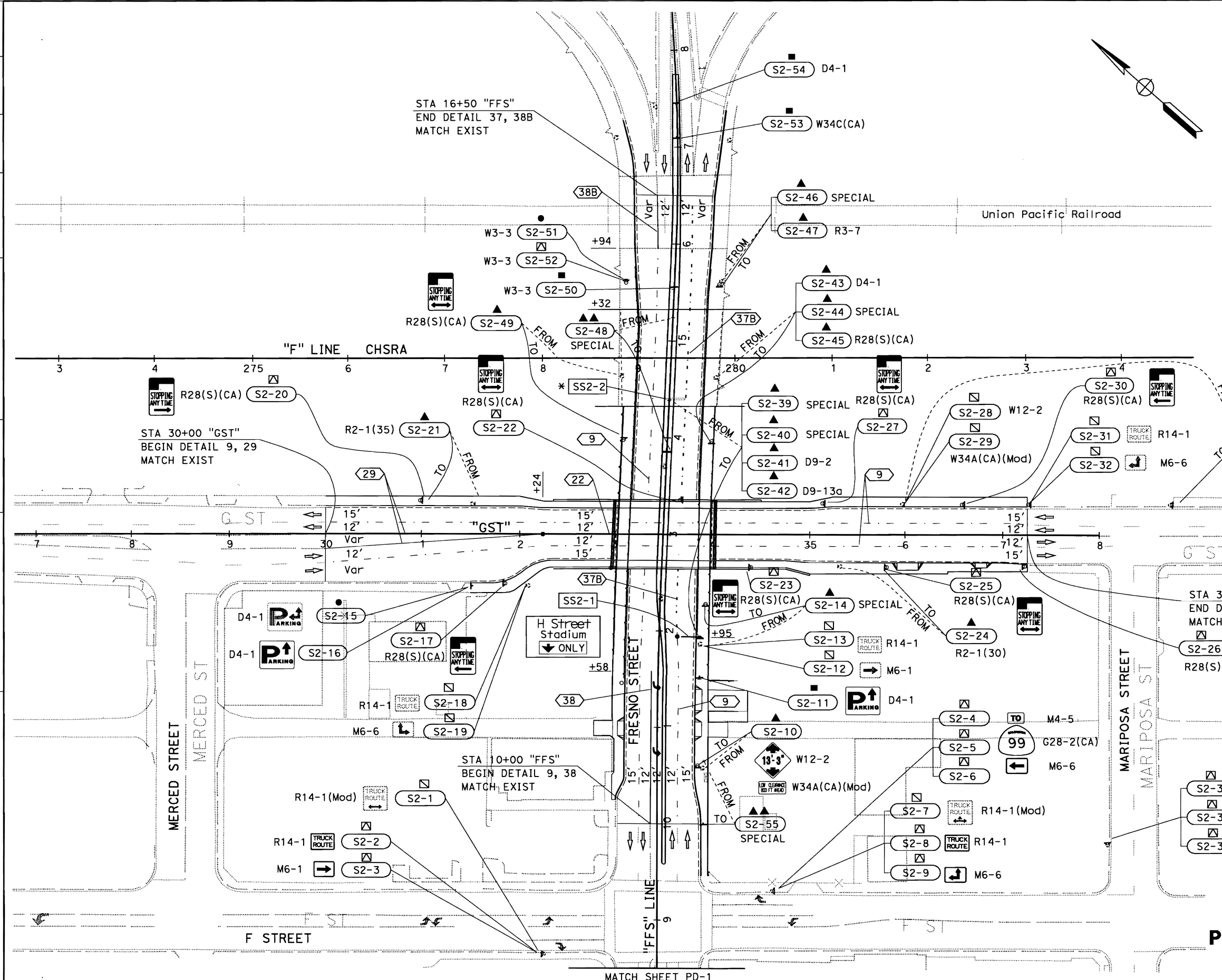
APPROVED FOR PAVEMENT DELINEATION AND SIGN WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
TRAFFIC DESIGN
FUNCTIONAL SUPERVISOR
MOHAMMED QATANI
CALTRANS
DESIGNED BY
KEVIN MURAI
CHECKED BY
HASSAN TAHA
REVISOR
DATE
REVISED BY
DATE

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL SHEETS
06	Fre			

ICW H M 5-29-12
REGISTERED CIVIL ENGINEER DATE
KEVIN H. MURAI
No. C 59586
Exp. 12/31/13
CIVIL
STATE OF CALIFORNIA

PLANS APPROVAL DATE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



PAVEMENT DELINEATION AND SIGN PLAN
SCALE: 1" = 50'
PD-2

LAST REVISION DATE PLOTTED => 29-MAY-2012 05-29-12 TIME PLOTTED => 14:21

ABBREVIATIONS:

- I : INSTALL/PLACE PAVEMENT DELINEATION
- R: REMOVE PAVEMENT DELINEATION
- EB: EASTBOUND
- WB: WESTBOUND
- NB: NORTHBOUND
- SB: SOUTHBOUND
- EA: EACH
- SQFT: SQUARE FEET
- LF: LINEAR FOOT
- SSBM: STRAP AND SADDLE BRACKET METHOD
- MP: METAL POST

PAVEMENT DELINEATION QUANTITIES

SHEET No.	STREET	LOCATION		DIRECTION	DETAIL No.	INSTALL/REMOVE	PAVEMENT MARKERS (RETRO-REFLECTIVE)		THERMOPLASTIC TRAFFIC STRIPE				THERMOPLASTIC PAVEMENT MARKING	
							TYPE D	TYPE G	SOLID YELLOW	SOLID WHITE	(BROKEN 12'-3')	(BROKEN 17'-7')		
		FROM	TO				EA	EA	4" LF	4" LF	8" LF	4" LF	DESCRIPTION	SQFT
PD-2	FRESNO	10+00	11+95	NB	9	I		5				195		
	FRESNO	11+95	16+50	NB	37B	I		30			455			
	FRESNO	10+00	15+94	SB	9	I		13				594		
	FRESNO	15+94	16+50	SB	38B	I		8		56				
	FRESNO	10+00	11+58	SB	38	I		8		158			2 TYPE IV	30
	G	30+00	37+25	EB	9	I		16				725		
	G	30+00	32+24	EB	29	I	22		896					
	G	32+24	37+25	EB	22	I	44		1002					
	G	30+00	37+25	WB	9	I		16				725		
SUBTOTAL							66	96	1898	214	455	2239		30
TOTAL								162		2112	455	2239		30

ROADSIDE SIGN

SHEET No.	SIGN No.	SIGN CODE	SIGN MESSAGE	PANEL SIZE (LxD)	BACKGROUND		LEGEND		GRAFFITI FLOW		FURNISH SINGLE SHEET ALUMINUM SIGN	METAL (ROADSIDE SIGN)	INSTALL SIGN (SSBM)	RESET ROADSIDE SIGN (MP)	RELOCATE ROADSIDE SIGN (SSBM)	REMOVE ROADSIDE SIGN (MP)	REMOVE ROADSIDE SIGN PANEL	RELOCATE ROADSIDE SIGN (MP)	
					SHEETING COLOR	RETROREFLECTIVITY ASTM TYPE	SHEETING COLOR	RETROREFLECTIVITY ASTM TYPE	STANDARD	PREMIUM	0.063"-UNFRAMED								
				INCH x INCH							SQFT								EA
PD-1	S1-1	M6-6	DIRECTIONAL ARROW AUXILIARY																
	S1-2	M6-4	DIRECTIONAL ARROW AUXILIARY	21 X 15	WHITE	III	BLACK			X	2.19		1					1	
PD-2	S2-1	R14-1	TRUCK ROUTE															1	
	S2-2	R14-1	TRUCK ROUTE	24 X 18	WHITE	III	BLACK		X		3.00		1						
	S2-3	M6-1	DIRECTIONAL ARROW AUXILIARY	21 X 15	WHITE	III	BLACK			X	2.19		1						
	S2-4	M4-5	TO	24 X 12	WHITE	III	BLACK			X	2.00		1						
	S2-5	R14-1	TRUCK ROUTE	24 X 18	WHITE	III	BLACK		X		3.00		1						
	S2-6	M6-6	DIRECTIONAL ARROW AUXILIARY	21 X 15	WHITE	III	BLACK			X	2.19		1						
	S2-7	R14-1	TRUCK ROUTE															1	
	S2-8	R14-1	TRUCK ROUTE	24 X 18	WHITE	III	BLACK		X		3.00		1						
	S2-9	M6-6	DIRECTIONAL ARROW AUXILIARY	21 X 15	WHITE	III	BLACK			X	2.19		1						
	S2-10	W12-2	LOW CLEARANCE													1			
	S2-11	D4-1	PARKING AREA												1				
	S2-12	M6-1	DIRECTIONAL ARROW AUXILIARY															1	
	S2-13	R14-1	TRUCK ROUTE															1	
	S2-14	SPECIAL	STORM READY COMMUNITY													1			
	S2-15	D4-1	PARKING AREA														1		
	S2-16	D4-1	PARKING AREA	30 X 24	GREEN	VII	WHITE	VII		X	5.00	1	1	8	1	2	1	5	0
TOTAL											24.75	1	8	1	2	1	5	0	

Dist: 06

COUNTY: Fre

ROUTE:

POST MILES TOTAL PROJECT: 5-29-12

SHEET No.: 5-29-12

TOTAL SHEETS: 5-29-12

REGISTERED CIVIL ENGINEER

DATE: 5-29-12

PLANS APPROVAL DATE:

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

KEVIN H. MURAI

No. C 59586

Exp. 12/31/13

CIVIL

STATE OF CALIFORNIA

CALIFORNIA

HIGH-SPEED RAIL AUTHORITY

PAVEMENT DELINEATION AND SIGN QUANTITIES PDQ-1

ROADSIDE SIGN

SHEET No.	SIGN No.	SIGN CODE	SIGN MESSAGE	PANEL SIZE (LxD)	BACKGROUND		LEGEND		GRAFFITI FLOW		FURNISH SINGLE SHEET ALUMINUM SIGN	METAL (ROADSIDE SIGN)	INSTALL SIGN (SSBM)	RESET ROADSIDE SIGN (MP)	RELOCATE ROADSIDE SIGN (SSBM)	REMOVE ROADSIDE SIGN (MP)	REMOVE ROADSIDE SIGN PANEL	RELOCATE ROADSIDE SIGN (MP)	
					SHEETING COLOR	RETROREFLECTIVITY ASTM TYPE	SHEETING COLOR	RETROREFLECTIVITY ASTM TYPE	STANDARD	PREMIUM	0.063"-UNFRAMED								
				INCH x INCH							SQFT	EA							
PD-2	S2-17	R28S (CA)	NO STOPPING ANY TIME WITH ARROW	12 X 18	WHITE	II	RED	II	X				1						
	S2-18	R14-1	TRUCK ROUTE								1.50						1		
	S2-19	M6-6	DIRECTIONAL ARROW AUXILIARY														1		
	S2-20	R28S (CA)	NO STOPPING ANY TIME WITH ARROW	12 X 18	WHITE	II	RED	II	X				1						
	S2-21	R2-1	SPEED LIMIT								1.50				1				
	S2-22	R28S (CA)	NO STOPPING ANY TIME WITH ARROW	12 X 18	WHITE	II	RED	II	X				1						
	S2-23	R28S (CA)	NO STOPPING ANY TIME WITH ARROW	12 X 18	WHITE	II	RED	II	X				1						
	S2-24	R2-1	SPEED LIMIT								1.50				1				
	S2-25	R28S (CA)	NO STOPPING ANY TIME WITH ARROW	12 X 18	WHITE	II	RED	II	X				1						
	S2-26	R28S (CA)	NO STOPPING ANY TIME WITH ARROW	12 X 18	WHITE	II	RED	II	X				1						
	S2-27	R28S (CA)	NO STOPPING ANY TIME WITH ARROW	12 X 18	WHITE	II	RED	II	X				1						
	S2-28	W12-2	LOW CLEARANCE									1.50						1	
	S2-29	W34A (CA)	DISTANCE AHEAD PLAQUE															1	
	S2-30	R28S (CA)	NO STOPPING ANY TIME WITH ARROW	12 X 18	WHITE	II	RED	II	X				1						
	S2-31	R14-1	TRUCK ROUTE									1.50						1	
	S2-32	M6-6	DIRECTIONAL ARROW AUXILIARY															1	
	S2-33	M4-5	TO													1			
	S2-34	G28-2 (CA)	STATE SHIELD FOR INDEPENDENT USE													1			
	S2-35	M6-6	DIRECTIONAL ARROW AUXILIARY													1			
	S2-36	M4-5	TO	24 X 12	WHITE	III	BLACK			X	X		1						
	S2-37	G28-2 (CA)	STATE SHIELD FOR INDEPENDENT USE	24 X 25	GREEN	III	WHITE			X		2.00	1						
	S2-38	M6-6	DIRECTIONAL ARROW AUXILIARY	21 X 15	WHITE	III	BLACK				X	4.17	1						
	S2-39	SPECIAL	LEGION OF VALOR MILITARY MUSEUM									2.19				1			
	S2-40	SPECIAL	HISTORICAL SITE													1			
	S2-41	D9-2	HOSPITAL SYMBOL													1			
	S2-42	D9-13a	HOSPITAL													1			
	S2-43	D4-1	PARKING AREA													1			
	S2-44	SPECIAL	CHUKCHANSI PARK													1			
	S2-45	R28S (CA)	NO STOPPING ANY TIME WITH ARROW													1			
	S2-46	SPECIAL	TREE CITY USA CITY OF FRESNO													1			
	S2-47	R3-7R	RIGHT LANE MUST TURN RIGHT													1			
	S2-48	SPECIAL	CITY OF FRESNO EVENT IN PROGRESS																1
	S2-49	R28S (CA)	NO STOPPING ANY TIME WITH ARROW													1			
	S2-50	W3-3	SIGNAL AHEAD SYMBOL												1				
	S2-51	W3-3	SIGNAL AHEAD SYMBOL														1		
S2-52	W3-3	SIGNAL AHEAD SYMBOL													1				
S2-53	W34C (CA)	CAUTION VERTICAL CLEARANCE 13'-3" ARROW												1					
S2-54	D4-1	PARKING AREA												1					
S2-55	SPECIAL	FRESNO FAX BUS STOP																1	
SUBTOTAL											20.35	0	11	3	16	1	6	2	
PDQ-1 SUBTOTAL											24.75	1	8	1	2	1	5	0	
TOTAL											45.10	1	19	4	18	2	11	2	

Dist

COUNTY

ROUTE

POST MILES TOTAL PROJECT

SHEET No.

TOTAL SHEETS

06

Fre

ICivil H. Murai

5-29-12

REGISTERED CIVIL ENGINEER

DATE

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.


KEVIN H. MURAI

No. C 59586

Exp. 12/31/13

CIVIL

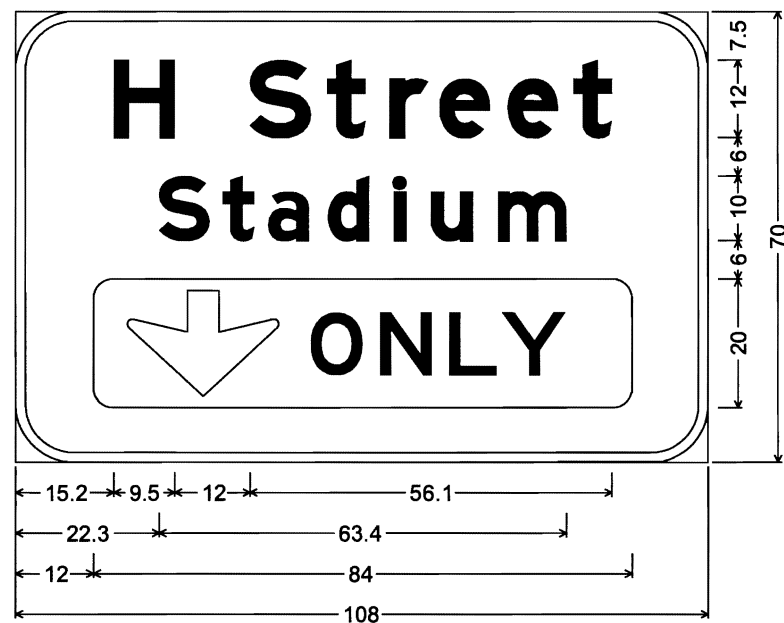
STATE OF CALIFORNIA



CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

PAVEMENT DELINEATION
AND SIGN QUANTITIES
PDQ-2

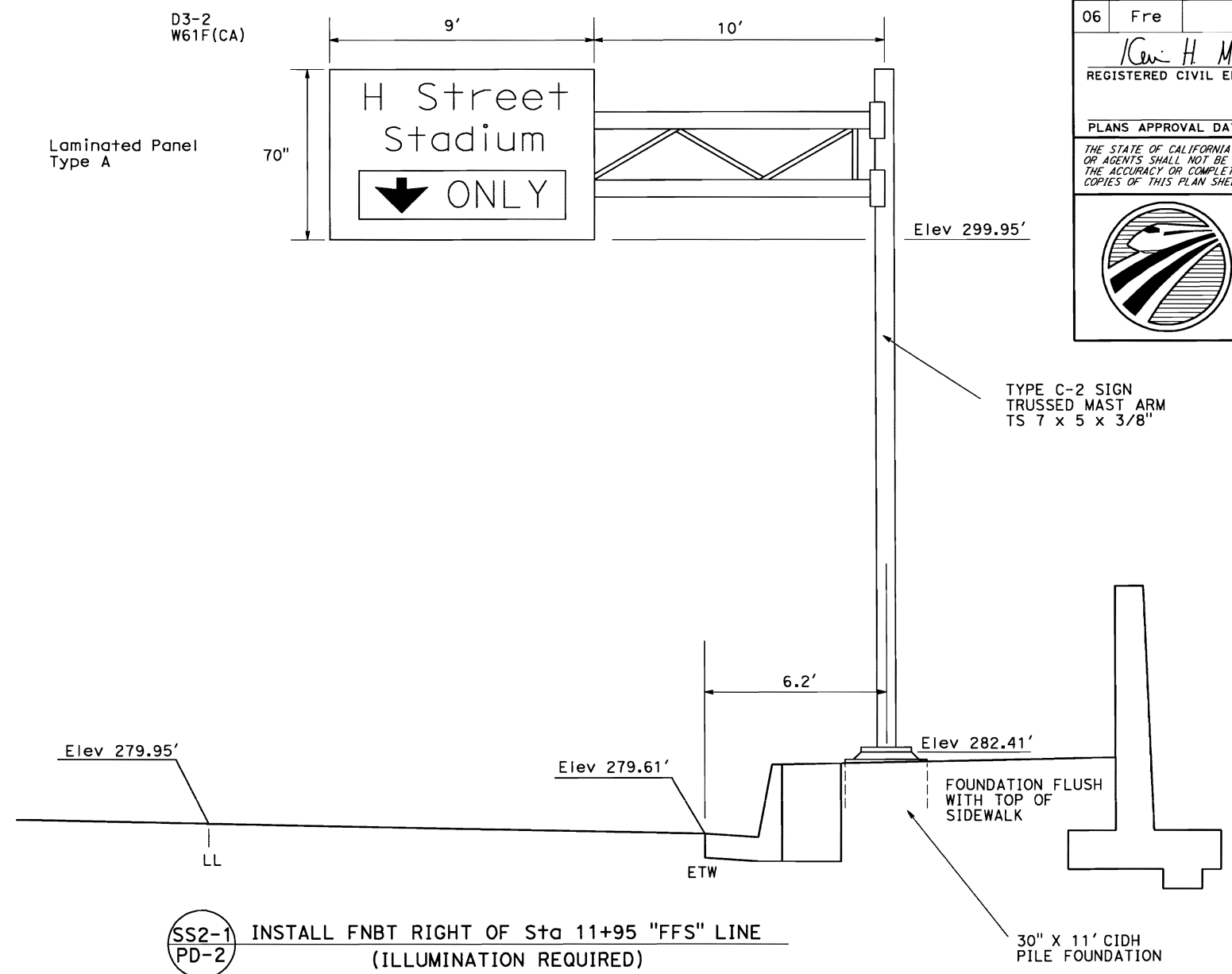
- NOTES:
1. BASE PLATE ELEVATIONS TO BE SET IN THE FIELD TO PROVIDE A VERTICAL CLEARANCE OF 18' MINIMUM FROM EITHER BOTTOM OF SIGN OR LIGHT FIXTURE MOUNTING BRACKETS TO ETW.
 2. CONTRACTOR SHALL VERIFY ALL FIELD CONTROLLING DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.



9.0" Radius, 1.5" Border, White on Green;
[H Street] E Mod; [Stadium] E Mod;
Rounded Rectangle 3.0" Radius Yellow;
Table of letter and object lefts.

H	S	t	r	e	e	t
15.2	36.7	48.8	58.6	66.2	76.6	86.8
S	t	a	d	i	u	m
22.3	32.4	39.6	49.0	59.2	64.9	75.1

12.0



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Fre				

ICen H. Murai 5-29-12
REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

KEVIN H. MURAI
No. C 59586
Exp. 12/31/13
CIVIL
STATE OF CALIFORNIA

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

SS2-1 INSTALL FNBT RIGHT OF Sta 11+95 "FFS" LINE
PD-2 (ILLUMINATION REQUIRED)

OVERHEAD SIGN STRUCTURE QUANTITIES

SHEET No.	SIGN No.	LOCATION	SIGN MESSAGE	OVERHEAD SIGN PANEL										PANEL SIZE	FURNISH SIGN STRUCTURE (LIGHTWEIGHT)	INSTALL SIGN STRUCTURE (LIGHTWEIGHT)	REMOVE SIGN STRUCTURE	CIDH CONCRETE PILE (SIGN FOUNDATION)
				SINGLE FACED	DOUBLE FACED	BACKGROUND		LEGEND		GRAFFITI FLOW		FURNISH LAMINATED PANEL SIGN (1" - TYPE A)						
						SHEETING COLOR	Retroreflectivity ASTM TYPE	SHEETING COLOR	Retroreflectivity ASTM TYPE	STANDARD	PREMIUM							
													SOFT					IN x IN
PD-2	SS2-1	Sta 11+95 on Fresno St FNBT	Fresno St LEFT LANE ↓	X		GREEN	IV	WHITE	IV		IV	52.5	108 x 70	2900	2900	1	11.0	
	SS2-2	Sta 14+50 on Fresno St FNBT	H Street Stadium ↓ ONLY															
TOTAL												52.5		2900	2900	1	11.0	

SIGN DETAILS AND QUANTITIES

NO SCALE SD-1

MINOR CONCRETE (MISCELLANEOUS CONSTRUCTION)

LOCATION		DRIVEWAY	CURB & GUTTER	CURB RAMP	SIDEWALK	Conc CURB	Conc BARRIER Trans
FROM	TO	CY	CY	CY	CY	CY	CY
"GST" @ Sta 31+66.00 Rt DWY-1	SEE Sh+ L-1	2.5					
"GST" @ Sta 35+30.00 Rt DWY-2	SEE Sh+ L-1	3.3					
"GST" @ Sta 36+03.00 Rt DWY-3	SEE Sh+ L-1	3.3					
"GST" @ Sta 36+78.00 Rt DWY-4	SEE Sh+ L-1	1.3					
"FFS" @ Sta 10+98.50 Lt DWY-5	SEE Sh+ L-1	8.8					
"FFS" @ Sta 10+98.50 Rt DWY-6	SEE Sh+ L-1	8.8					
"FFS" @ Sta 11+29.00 Rt DWY-7	SEE Sh+ L-1	4.4					
"GST" @ Sta 30+00.00 Lt	"GST" @ Sta 32+35.00 Lt		21.7				
"GST" @ Sta 31+50.00 Rt	"GST" @ Sta 32+35.00 Rt		10.9				
"GST" @ Sta 34+50.00 Lt	"GST" @ Sta 37+25.00 Lt		25.4				
"GST" @ Sta 35+00.00 Rt	"GST" @ Sta 37+25.00 Rt		20.8				
"FFS" @ Sta 09+46.22 Rt	"FFS" @ Sta 17+36.18 Rt		73.2				
"FFS" @ Sta 10+25.00 Lt	"FFS" @ Sta 17+28.26 Lt		65.0				
"FFS" SE CORNER F & FRESNO St	SEE Sh+ C-7			4.2			
"FFS" SW CORNER F & FRESNO St	SEE Sh+ C-8			11.4			
"FFS" NW CORNER F & FRESNO St	SEE Sh+ C-9			7.4			
"GST" @ Sta 30+00.00 Lt	"GST" @ Sta 32+35.00 Lt				23.3		
"GST" @ Sta 31+50.00 Rt	"GST" @ Sta 32+35.00 Rt				7.7		
"GST" @ Sta 34+50.00 Lt	"GST" @ Sta 37+25.00 Lt				26.0		
"GST" @ Sta 35+00.00 Rt	"GST" @ Sta 37+25.00 Rt				19.6		
"FFS" @ Sta 09+46.22 Rt	"FFS" @ Sta 17+36.18 Rt				109.7		
"FFS" @ Sta 10+25.00 Lt	"FFS" @ Sta 17+28.26 Lt				108.9		
"FFS" @ Sta 10+53.74 Lt	"FFS" @ Sta 10+91.00 Lt					1.9	
"FFS" @ Sta 11+06.00 Lt	"FFS" @ Sta 11+18.00 Lt					1.0	
"FFS" @ Sta 11+06.00 Rt	"FFS" @ Sta 11+18.00 Rt					1.9	
"FFS" @ Sta 09+46.22 Rt	"FFS" @ Sta 10+91.00 Rt					5.1	
"FFS" @ Sta 09+60.22 MEDIAN	"FFS" @ Sta 18+40.00 MEDIAN					54.4	
"FFS" @ Sta 11+18.00 Lt	"FFS" @ Sta 12+00.00 Lt						2.2
"FFS" @ Sta 11+50.00 Rt	"FFS" @ Sta 12+00.00 Rt						1.3
"FFS" @ Sta 15+75.00 Lt	"FFS" @ Sta 16+75.00 Lt						2.6
"FFS" @ Sta 15+75.00 Rt	"FFS" @ Sta 16+75.00 Rt						2.6
SUBTOTAL		32.4	217.0	23.0	295.2	64.3	8.7
TOTAL		640.6					

Dist

COUNTY

ROUTE

POST MILES
TOTAL PROJECT

SHEET
No.

TOTAL
SHEETS

06

Fre

5/29/12

DATE

REGISTERED CIVIL ENGINEER

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER


GILBERTO BACA

No. 63140

Exp. 6/30/12

CIVIL

STATE OF CALIFORNIA



CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

EARTHWORK

DESCRIPTION	ROADWAY EXCAVATION	IMPORT BORROW
	CY	CY
FRESNO St "FFS" @ Sta 10+00.00 TO 16+75.00	14,040	65
G St "GS" @ Sta 30+00.00 TO 37+25.00	1,510	2,555
TOTAL	15,550	2620

(N) NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY.

STRUCTURAL SECTION


LOCATION	HOT MIX ASPHALT (TYPE A)	CLASS 2 AGGREGATE BASE
	TON	CY
FRESNO St "FFS"	1,470	2,250
G St "GST" @ Sta 30+00 TO 37+25	1,402	2,077
HMA (Misc AREA) (SHEET Q-2)	501	
TOTAL	3,373	4,327

CONCRETE BARRIER
(TYPE 60 MODIFIED)

LOCATION		CONCRETE BARRIER
FROM	TO	CY
"FFS" @ Sta 12+00.00, Lt	"FFS" @ Sta 15+75.00, Lt	50.6
"FFS" @ Sta 12+00.00, Rt	"FFS" @ Sta 15+75.00, Rt	50.6
TOTAL		101.2

SUMMARY OF QUANTITIES
NO SCALE
Q-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

 **ELECTRICAL DESIGN**

FUNCTIONAL SUPERVISOR

ALT BAKHDOUN

CALCULATED-DESIGNED BY

CHECKED BY

DANIEL T. VO

MONA ATTALLAH

REVISED BY

DATE REVISED

LEGEND:(FOR SHEETS E-2 AND E-3)

- 1

RS

EXISTING TYPE 3R LIGHTING SERVICE EQUIPMENT ENCLOSURE.
- 2

SEE SHEET E-5 FOR EXISTING SIGNAL STANDARD AND PULL BOX REMOVAL.
- 3

TO SERVICE EQUIPMENT ENCLOSURE AT NW CORNER OF FRESNO St AND H St.
- 4

TO EXISTING STREET LIGHTS.
- 5

SEE SHEET E-6 FOR EXISTING SIGNAL STANDARD AND PULL BOX REMOVAL.
- 6

RC

EXISTING PB, SEE E-3 FOR NEW PB AND SPLICE CONDUCTORS.
- 7

120/240 V, 1Ø, 3-WIRE TYPE III-AF SERVICE EQUIPMENT ENCLOSURE WITH THE FOLLING CIRCUIT BREAKERS:


AMPERES	VOLTS	POLES	NAMEPLATE	METER	PHOTOELECTRIC CONTROL TYPE
100	240	2	MAIN BREAKER	NO	_____
40	120	1	STREET LIGHT 1	NO	II
40	120	1	STREET LIGHT 2	NO	II
40	120	1	STREET LIGHT 3	NO	II
40	120	1	ILLUMINATION SIGN	NO	SC1A
15	120	1	LIGHT CONTROL	NO	_____


REFER TO SHEET E-12 FOR CITY OF FRESNO PUBLIC WORK STANDARD DRAWING SERVICE ENCLOSURE DETAIL.


- 8

1½"C, 3#6 (LTG).
- 9

1½"C, 2#6 (LTG).
- 10

SEE SHEET E-7 CONDUIT RUN  FOR CONDUCTORS.
- 11

SEE SHEET E-7 CONDUIT RUN  FOR CONDUCTORS.
- 12

SEE SHEET E-7 CONDUIT RUN  FOR CONDUCTORS.
- 13

SEE SHEET E-7 FOR TRAFFIC SIGNAL PULL BOXES LOCATION.
- 14

SEE SHEET E-2 FOR **RC** EXISTING PULL BOX.
- 15

SEE SHEET E-7 FOR SERVICE EQUIPMENT ENCLOSURE.
- 16

SEE SHEET E-7 FOR PULL BOX, CONDUITS AND CONDUCTORS.
- 17

3"C, 4#6 (LTG), 2#6 (SIGN), 3#12 (PEU).
- 18

1½"C, TYPE 1, 4#6 (LTG).
- 19

1½"C, 3#6 (LTG), 2#6 (SIGN).
- 20

1½"C, 4#6 (LTG).
- 21

1½"C, TYPE 1, 3#6 (LTG), 2#6 (SIGN).
- 22

INSTALL PHOTO ELECTRICAL UNIT ON TOP OF LUMINAIRE.
- 23


1½"C, TYPE 1, 3#6 (LTG).
- 24


SEE SIGN PLANS FOR SIGN DETAILS.
- 25


SEE STRUCTURE PLANS FOR LIGHT MOUNTING DETAILS.


SYMBOLS:


- PROPOSE











- EXISTING








- CITY OF FRESNO DECORATIVE ELECTROLIER

CITY OF FRESNO DECORATIVE ELECTROLIER ON STRUCTURE

CITY OF FRESNO COMMUNICATION CABINET

4’X7’ FIBER OPTIC VAULT

ABBREVIATIONS:

- PWSTD - CITY OF FRESNO PUBLIC WORK STANDARD DRAWING
- PWSTS - CITY OF FRESNO PUBLIC WORK STANDARD SPECIFICATIONS
- PG&E - PACIFIC GAS AND ELECTRIC
- ITS - INTELLIGENT TRANSPORTATION SYSTEM
- HDPE - HIGH DENSITY POLYETHYLENE
- SMFO - SINGLE MODE FIBER OPTIC

GENERAL NOTES:(FOR SHEETS E-1, E-2, AND E-3)

1. ALL WORK SHALL CONFORM TO THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD PLANS, STANDARD SPECIFICATIONS, CITY OF FRESNO PUBLIC WORK DEPARTMENT STANDARD PLANS, AND CITY OF FRESNO PUBLIC WORK DEPARTMENT STANDARD SPECIFICATIONS.
2. THE CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF ALL EXISTING UNDERGROUND UTILITIES, WETHER OR NOT THEY ARE SHOWN ON THESE PLANS. THE CONTRACTOR SHALL CONTACT US (800-642-2444) AT LEAST 48 HOURS BEFORE BEGINNING WORK. WHERE MARKING ARE NEAR PROPOSED FOUNDATONS, THE CONTRACTOR SHALL LOCATE UNDERGROUND UTILITIES BY POT HOLDING PRIOR TO EXCAVATIN, CALTRANS IS NOT A MEMBER OF USA UNDERGROUND LOCATING SERVICE.
3. ALL LUNINAIRE SHALL BE COBRA HEAD TYPE, 120V HIGH PRESSURE SODIUM VAPOR WITH HIGH POWER FACTOR BALLAST, LENS SHALL BE POLYCARBONEATE PLASTIC AND BULB SHALL BE 70 WATTS. REFER TO PWSTD AND PWSTS FOR DETAILS.
4. THE DECORATIVE STREET LIGHT POLE STANDARDS SHALL APPLY TO THE "DOWNTOWN FRESNO AREA" AS DEFIND BY CITY OF FRESNO PUBLIC WORK DRAWING. REFER TO PWSTD AND PWSTS FOR DETAILS.
5. ALL PULL BOXES FOR CITY STREET LIGHTS SHALL BE No. 3½ UNLESS OTHERWISE NOTED. REFER PWSTD FOR DETAIL.
6. RIGHT OF WAY LIMITS ARE INDETERMINATE, AND ARE NOT SHOWN. THE CONTRACTOR MUST CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE FOR CONDITIONS OF USE PRIOR TO COMMENCING WORK.


CITY STREET LIGHT AND SIGN ILLUMINATION

NO SCALE

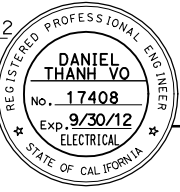
E-1

APPROVED FOR ELECTRICAL WORK ONLY


Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Fre				

 5/29/12
REGISTERED ELECTRICAL ENGINEER DATE

PLANS APPROVAL DATE

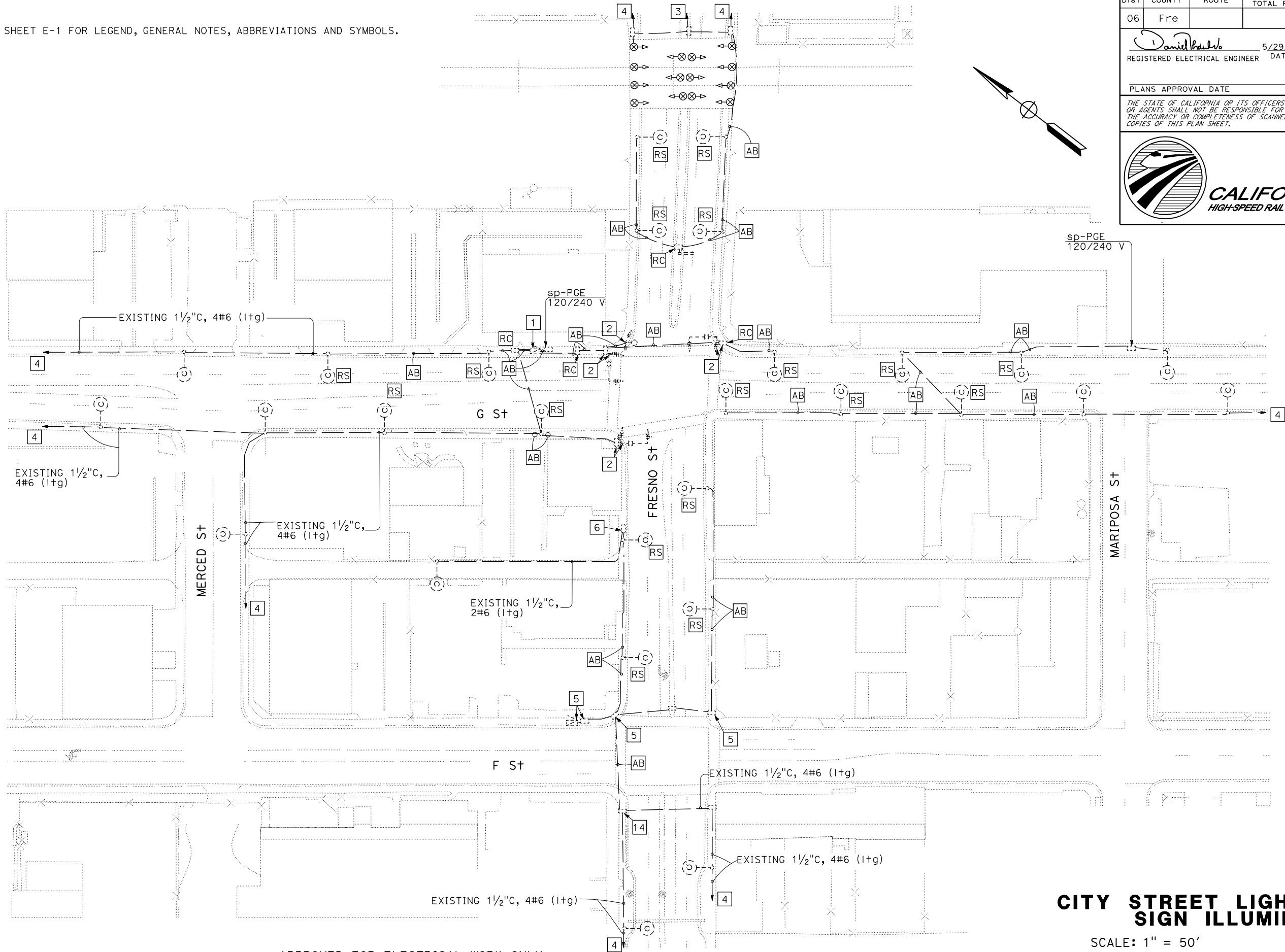


THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

**CALIFORNIA**
HIGH-SPEED RAIL AUTHORITY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR		CALCULATED- DESIGNED BY	DANIEL T. VO	REVISED BY			
	ALI BAKHDOUD							
	ELECTRICAL DESIGN							
			DATE			DATE		
			REVISED			REVISED		

SEE SHEET E-1 FOR LEGEND, GENERAL NOTES, ABBREVIATIONS AND SYMBOLS.



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Fre				

Daniel Paulo 5/29/12
REGISTERED ELECTRICAL ENGINEER DATE

PLANS APPROVAL DATE


THE STATE OF CALIFORNIA OR ITS OFFICERS
OR AGENTS SHALL NOT BE RESPONSIBLE FOR
THE ACCURACY OR COMPLETENESS OF SCANNED
COPIES OF THIS PLAN SHEET.

CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

REGISTERED PROFESSIONAL ENGINEER
DANIEL THANH VO
No. 17408
Exp. 9/30/12
ELECTRICAL
STATE OF CALIFORNIA

**CITY STREET LIGHT AND
SIGN ILLUMINATION**
SCALE: 1" = 50'
E-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

 **ELECTRICAL DESIGN**

FUNCTIONAL SUPERVISOR

ALT BAKHOUD

CALCULATED-DESIGNED BY

CHECKED BY

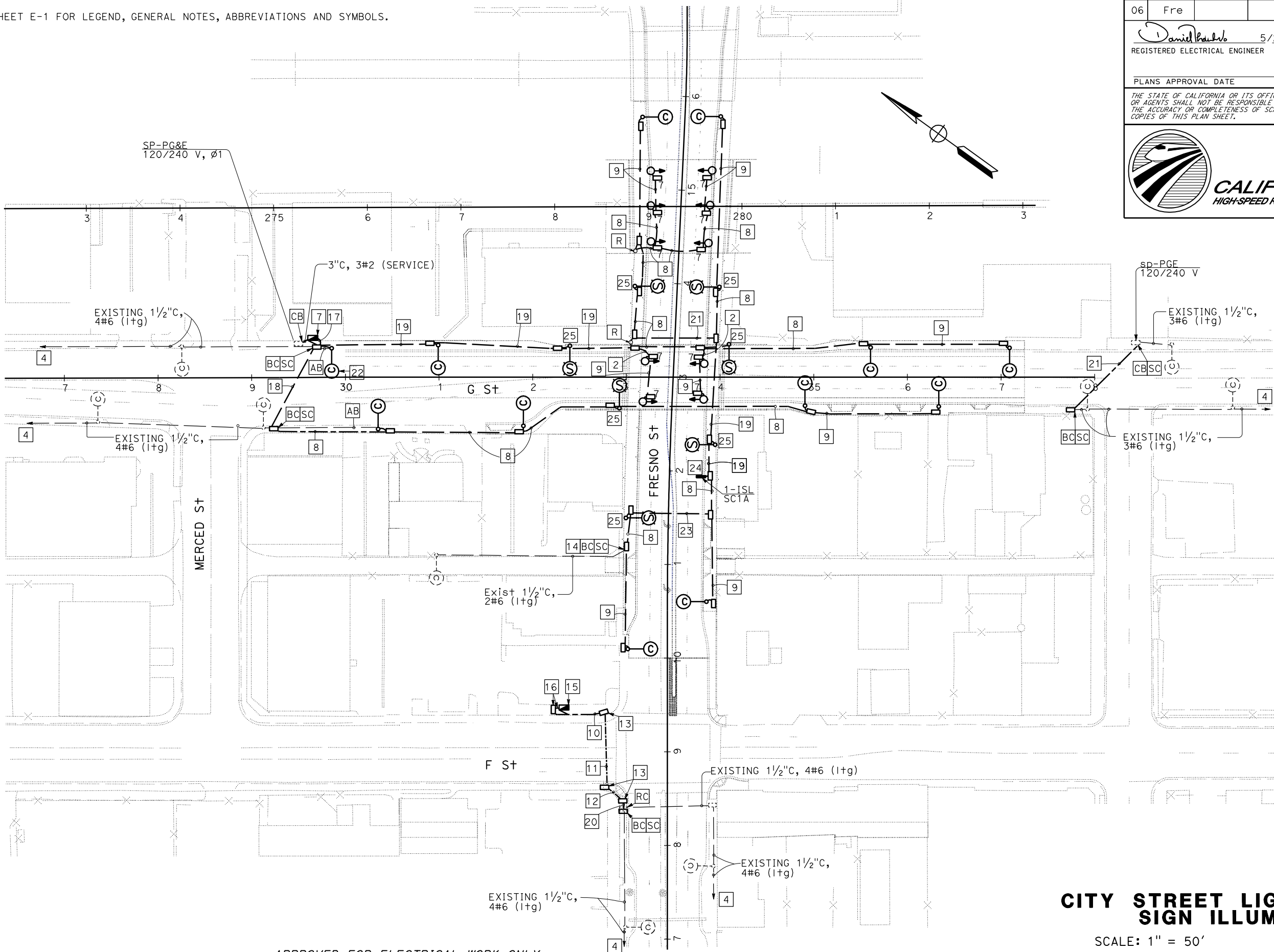
DANIEL T. VO

MONA ATTALLAH

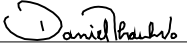
REVISED BY

DATE REVISED

SEE SHEET E-1 FOR LEGEND, GENERAL NOTES, ABBREVIATIONS AND SYMBOLS.




Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Fre				


REGISTERED ELECTRICAL ENGINEER

5/29/12
DATE

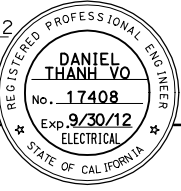
PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

REGISTERED PROFESSIONAL ENGINEER




CITY STREET LIGHT AND
SIGN ILLUMINATION

E-3

SCALE: 1" = 50'

APPROVED FOR ELECTRICAL WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

 **ELECTRICAL DESIGN**

FUNCTIONAL SUPERVISOR

ALT BAKHOUD

REVISOR

DANIEL T. VO

DATE

MONA ATTALLAH

REVISION

DANIEL T. VO

DATE

MONA ATTALLAH

LEGENDS: (FOR SHEETS E-5, E-6, E-7, AND E-8)

- 1

RS

EXISTING TYPE A SERVICE ENCLOSURE.
- 2

SEE SHEET E-2 FOR REMOVAL OF EXISTING TYPE 3R ENCLOSURE.
- 3

RELOCATE CCTV AND CCTV STANDARD TO INTERSECTION AT FRESNO ST AND F ST. SEE SHEET E-7 FOR CCTV RELOCATION.
- 4

AB

EXISTING DETECTOR LOOPS.
- 5

RS

RELOCATE CCTV EQUIPMENT TO INTERSECTION AT FRESNO ST AND F ST. EXISTING COMMUNICATION CABINET. SEE SHEET E-7 FOR CCTV RELOCATION.
- 6

RS

EXISTING SIGNAL STANDARD, RELOCATE SNS TO POLE G SHEET E-7.
- 7

RS

EXISTING SIGNAL STANDARD, RELOCATE SNS TO POLE C SHEET E-7.
- 8

RS

EXISTING SIGNAL STANDARD, RELOCATE SNS TO POLE E SHEET E-7.
- 9

RS

EXISTING SIGNAL STANDARD, RELOCATE SNS TO POLE A SHEET E-7.
- 10

120/240 V, 1Ø, 3 WIRE, TYPE III-AF CITY SERVICE EQUIPMENT ENCLOSURE WITH THE FOLLOWING CIRCUIT BREAKERS:

AMPERES	VOLTS	POLES	NAMEPLATE	METER	PHOTOELECTRIC CONTROL TYPE
100	240	3	MAIN BREAKER	1-METER 2-UNMETER	_____
40	120	1	TRAFFIC SIGNAL	YES	_____
40	120	1	STREET LIGHT 1	NO	II
40	120	1	STREET LIGHT 2	NO	II
40	120	1	SAFETY LIGHT	NO	II
15	120	1	LIGHT CONTROL	NO	_____
_____	_____	4	SPACE	_____	_____

REFER TO PWSTD DETAIL ON SERVICE EQUIPMENT ENCLOSURE.

POLE AND EQUIPMENT SCHEDULE

	STANDARD			VEH SIG MTG		PED SIG MTG	PPB		HPS LUM	SPECIAL REQUIREMENTS
	TYPE	SMA	LMA	MAST ARM	POLE		Ø	ARROW		
A	24-3-113	35	12	MAS MAS	SV-1-T	SP-1-T	4	←	200 W	18 F=16'
B	1-A				TV-2-T	SP-1-T	4	→		
C	26-3-113	45	12	MAS MAS	SV-1-T	SP-1-T	2	←	200 W	19 F=19'
D	1-A				TV-2-T	SP-1-T	2	→		
E	24-3-113	35	12	MAS MAS	SV-1-T	SP-1-T	8	←	200 W	20 F=16'
F	1-A				TV-2-T	SP-1-T	8	→		
G	26-3-113	45	12	MAS MAS	SV-1-T	SP-1-T	6	←	200 W	21 F=19'
H	1-A				TV-2-T	SP-1-T	6	→		

- 11

MODEL 332L CABINET WITH 2Ø7ØL CONTROLLER PER PWSTS. REFER TO PWSTD FOR MODEL 332I DETAIL.
- 12

MODEL 336 COMMUNICATION CABINET WITH RELOCATED EXISTING CCTV EQUIPMENT IN NOTE 5 SHEET E-5. REFER TO PWSTD DETAIL.
- 13

FIBER OPTIC VAULT. REFER TO PWSTD DETAIL.
- 14

6-1½"C HDPE, 1-6 SMFO. REFER TO PWSTD FOR ITS CONDUIT INSTALLATION DETAIL.
- 15

2-1½"C HDPE, 1-CAT 5E, AND 3 CAMERA POWER CABLES. REFER PWSTD FOR ITS CONDUIT INSTALLATION DETAIL.
- 16

RELOCATE CCTV AND CCTV STANDARD FROM INTERSECTION AT FRESNO ST AND G ST AS NOTE 3 SHEET E-5.
- 17

INSTALL PEU ON TOP OF LUMINAIRE.
- 18

INSTALL RELOCATED SNS FROM 9 SHEET E-5 ON SIGANL POLE.
- 19

INSTALL RELOCATED SNS FROM 7 SHEET E-5 ON SIGANL POLE.
- 20

INSTALL RELOCATED SNS FROM 8 SHEET E-5 ON SIGANL POLE.
- 21

INSTALL RELOCATED SNS FROM 6 SHEET E-5 ON SIGANL POLE.
- 22

TO STREET LIGHT PULL BOX. SEE SHEET E-3 FOR CONTINUATION.
- 23

REFER TO PWSTD FOR LOOP DETECTOR PLACEMENT DETAIL.
- 24

TO CONTROLLER CABINET AT SOUTH EAST CORNER OF INTERSECTION FRESNO ST AND E ST.
- 25

RD

EXISTING 6-SMO, ADD 6-SMO. REFER TO SHEET E-9 FOR FIBER OPTIC DIAGRAM.
- 26

TO EXISTING FIBER OPTIC VAULT AT NORTH EAST CORNER OF INTERSECTION FRESNO ST AND BROADWAY ST. SEE SHEET E-9 FOR FIBER OPTIC CONNECTION.

GENERAL NOTES FOR SHEETS E-5, E-6, E-7, E-8 AND E-9

1. ALL WORK SHALL CONFORM TO THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD PLANS, STANDARD SPECIFICATIONS, CITY OF FRESNO PUBLIC WORK DEPARTMENT STANDARD PLANS, AND CITY OF FRESNO PUBLIC WORK DEPARTMENT STANDARD SPECIFICATIONS.
2. THE CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF ALL EXISTING UNDERGROUND UTILITIES, WETHER OR NOT THEY ARE SHOWN ON THESE PLANS. THE CONTRACTOR SHALL CONTACT US (800-642-2444) AT LEAST 48 HOURS BEFORE BEGINNING WORK. WHERE MARKING ARE NEAR PROPOSED FOUNDATONS, THE CONTRACTOR SHALL LOCATE UNDERGROUND UTILITIES BY POT HOLDING PRIOR TO EXCAVATIN, CALTRANS IS NOT A MEMBER OF USA UNDERGROUND LOCATING SERVICE.
3. SEE SHEET E-1 FOR SYMBOLS AND ABBREVIATIONS.
4. REFER TO PWSTD AND PWSTS FOR DECORATIVE SIGNAL STANDARD IN DOWNTOWN AREA.
5. ALL PULL BOXES SHALL BE No. 5 (E), UNLESS OTHERWISE NOTED.
6. RIGHT OF WAY LIMITS ARE INDETERMINATE, AND ARE NOT SHOWN. THE CONTRACTOR MUST CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE FOR CONDITIONS OF USE PRIOR TO COMMENCING WORK.

Dist

COUNTY

ROUTE

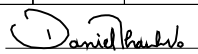
POST MILES TOTAL PROJECT

SHEET No.

TOTAL SHEETS

06

Fre




5/29/12

REGISTERED ELECTRICAL ENGINEER

DATE

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

**CALIFORNIA**
HIGH-SPEED RAIL AUTHORITY

REGISTERED PROFESSIONAL ENGINEER

DANIEL THANH VO

No. 17408

Exp. 9/30/12

ELECTRICAL

STATE OF CALIFORNIA

CABLE SCHEDULE			CONDUIT RUN NUMBER AND SIZE								
CABLE TYPE	POLE	PHASE	1	2	3	4	5	6	7	8	9
			2-4"	2-4"	4"	4"	4"	4"	4"	4"	4"
VEH-PED 12CSC	A	1,6,6P	4	1	1						
	B	1,2,2p	4	1	1	1					
	C	7,4,4P	2	1	1	1	1				
	D	7,8,8p	2	1	1	1	1	1			
	E	2,5,2p	8	1	1	1	1	1	1		
	F	5,6,6p	8	1	1				1	1	1
	G	3,8,8p	6	1	1				1	1	1
	H	3,4,4p	6	1	1				1	1	
TOTAL			8	8	4	3	2	1	3	2	1
AWG			CIRCUIT								
#6			SAFETY LIGHT AND STREET LIGHT								
#12			PEU								
EVC			4	4	2	2	2	2	1	1	
SIC			1	1	1	1	1				
DETECTORS-TYPE B DLC											
PHASE											
Ø1			2	2					2	2	2
Ø2			2	2	2						
Ø2 ADV			1	1	1						
Ø3			2	2	2	2	2				
Ø4			2	2					2		
Ø4 ADV			1	1					1		
Ø5			2	2	2						
Ø6			2	2					2	2	2
Ø6 ADV			1	1					1	1	1
Ø7			2	2					2		
Ø8			2	2	2	2	2				
Ø8 ADV			1	1	1	1	1				
TOTAL			20	20	10	5	5		10	5	5

CONDUIT RUN 3 5 8 SHALL BE TYPE 1.

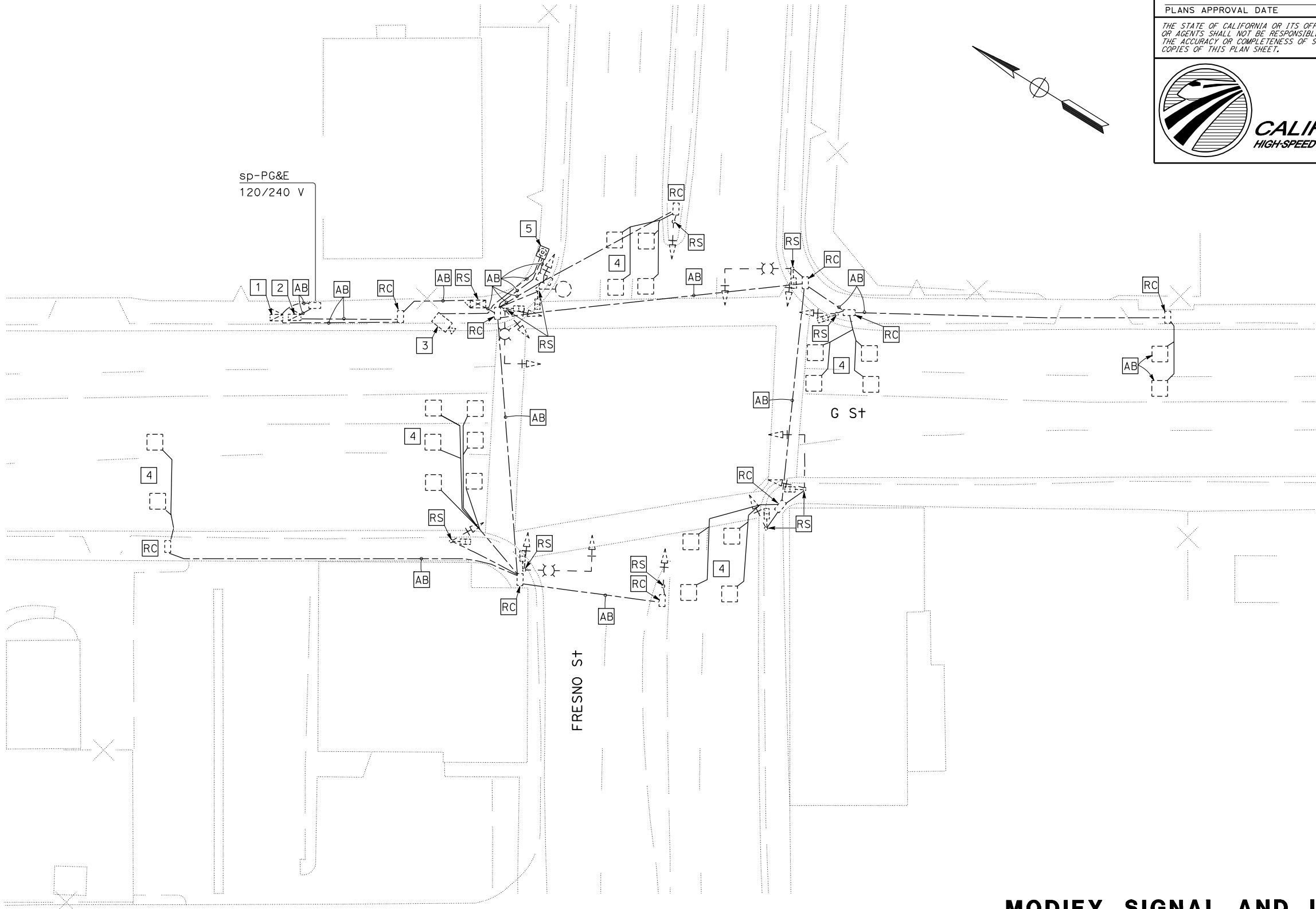
MODIFY SIGNAL AND LIGHTING

MODIFY CLOSED CIRCUIT TELEVISION

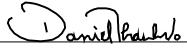
NO SCALE

E-4

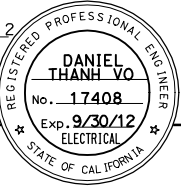
SEE SHEET E-4 FOR LEGENDS AND NOTES.




Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
06	Fre				


REGISTERED ELECTRICAL ENGINEER
DATE 5/29/12

PLANS APPROVAL DATE



THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

MODIFY SIGNAL AND LIGHTING

MODIFY CLOSED CIRCUIT TELEVISION SYSTEM

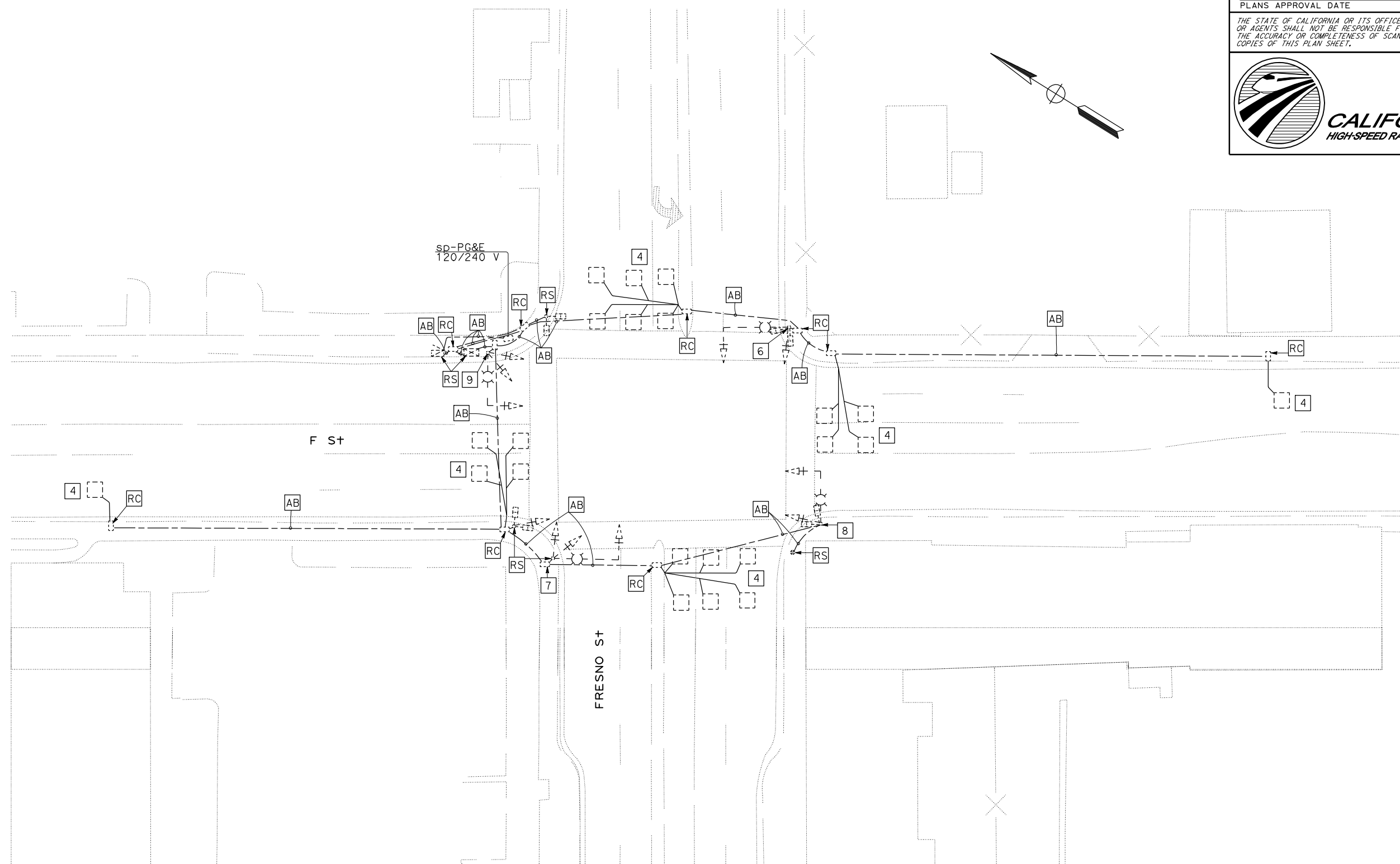
E-5

APPROVED FOR ELECTRICAL WORK ONLY


SCALE: 1" = 20'

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED-DESIGNED BY	DANIEL T. VO	REVISED BY	
St. Gobans® ELECTRICAL DESIGN	ALI BAKHDOUN	CHECKED BY	MONA ATTALLAH	DATE REVISED	

SEE SHEET E-4 FOR NOTES AND LEGENDS.

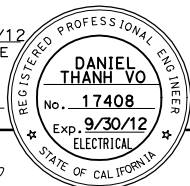



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL SHEETS
06	Fre			

 5/29/12
 REGISTERED ELECTRICAL ENGINEER DATE

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS
 OR AGENTS SHALL NOT BE RESPONSIBLE FOR
 THE ACCURACY OR COMPLETENESS OF SCANNED
 COPIES OF THIS PLAN SHEET.






CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

**MODIFY SIGNAL AND LIGHTING
MODIFY CLOSED CIRCUIT TELEVISION SYSTEM**

APPROVED FOR ELECTRICAL WORK ONLY

SCALE: 1" = 20'

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

 **ELECTRICAL DESIGN**

FUNCTIONAL SUPERVISOR

ALI BAKHOUD

DESIGNED BY

CHECKED BY

DANIEL T. VO

MONA ATTALLAH

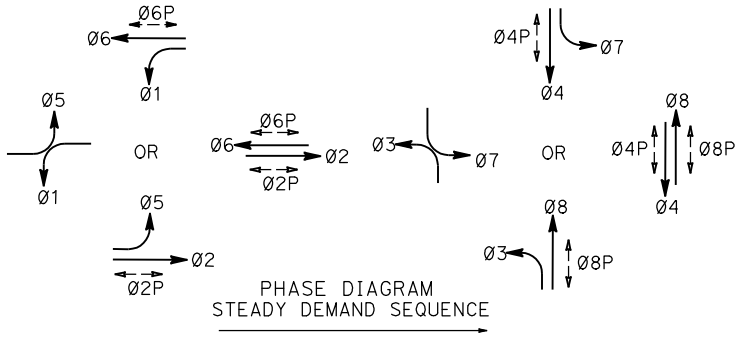
REVISOR

DATE

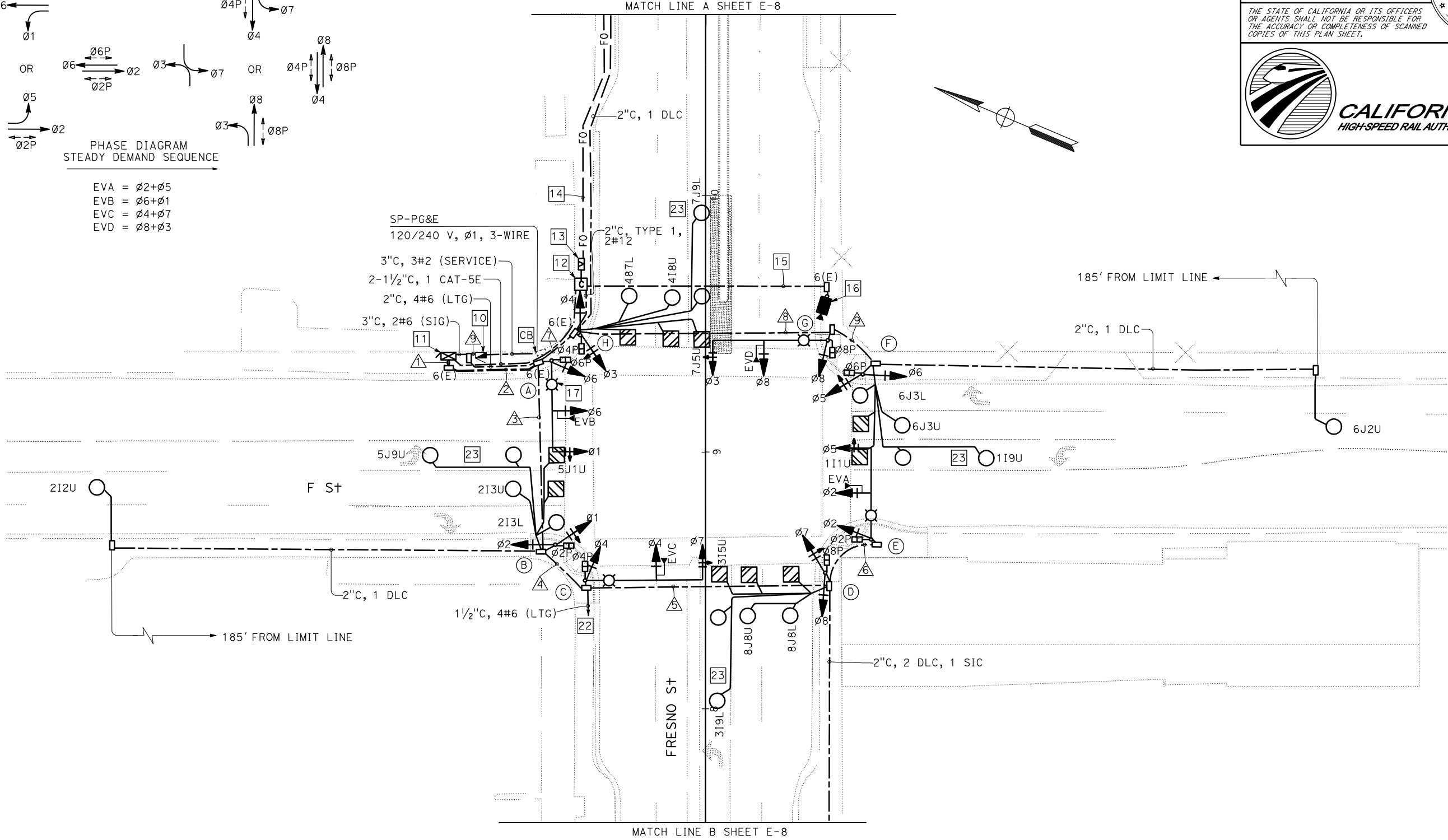
REVISED BY

DATE


SEE SHEET E-4 FOR NOTES AND LEGENDS.



EVA = Ø2+Ø5
EVB = Ø6+Ø1
EVC = Ø4+Ø7
EVD = Ø8+Ø3




Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL SHEETS
06	Fre			


REGISTERED ELECTRICAL ENGINEER

5/29/12
DATE

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

**CALIFORNIA**
HIGH-SPEED RAIL AUTHORITY

REGISTERED PROFESSIONAL ENGINEER

DANIEL THANH VO
No. 17408
Exp. 9/30/12
ELECTRICAL

STATE OF CALIFORNIA

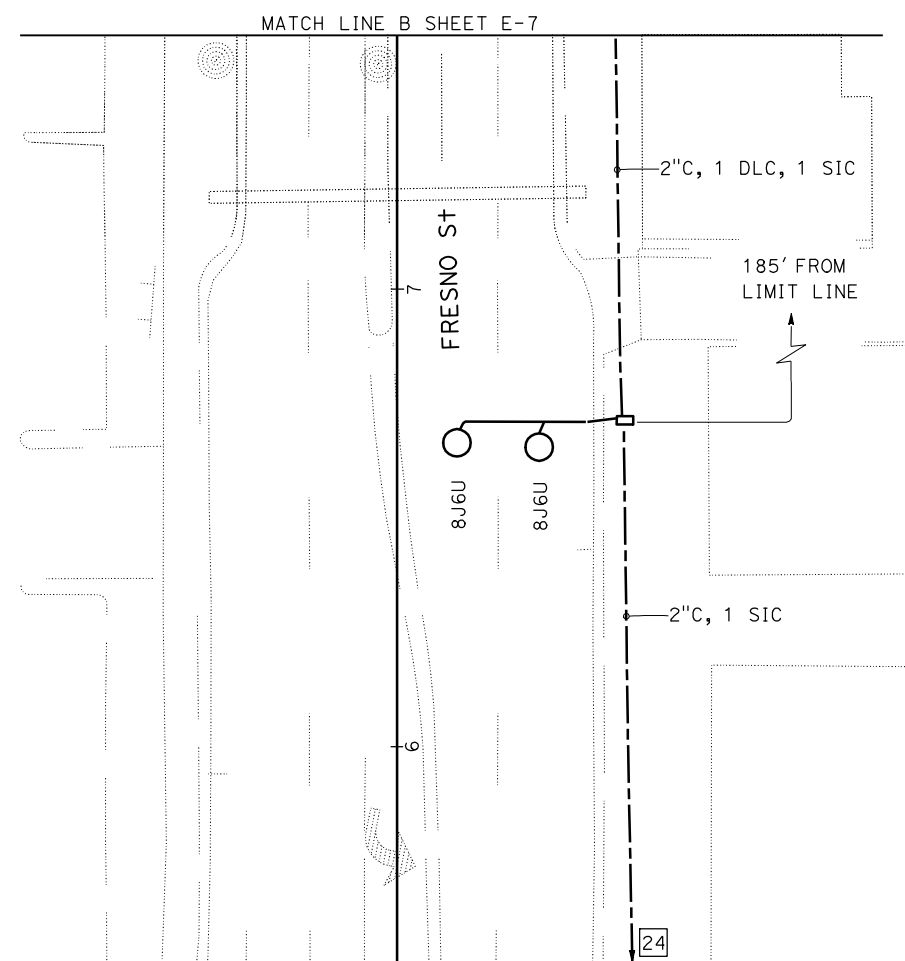
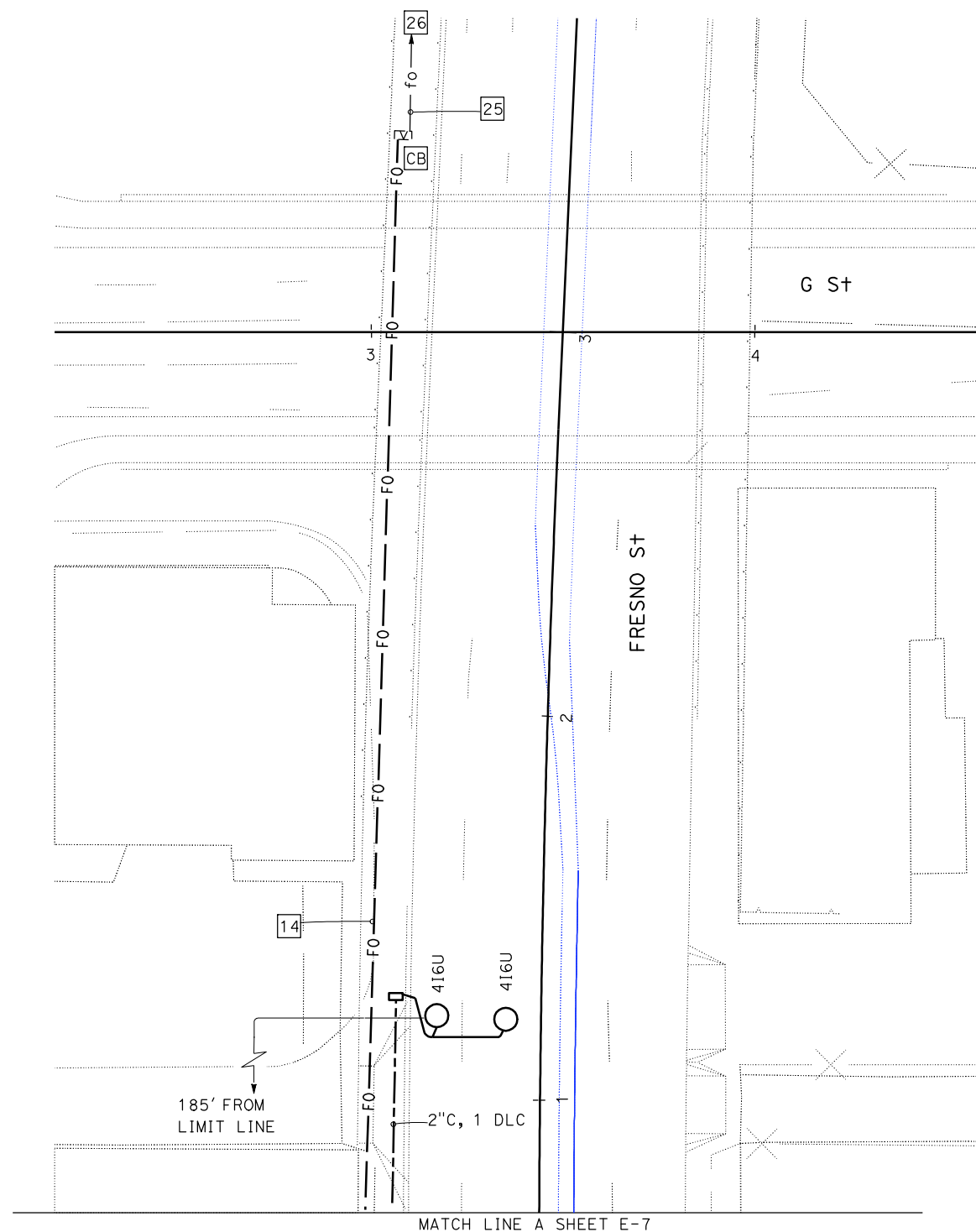
MODIFY SIGNAL AND LIGHTING
MODIFY CLOSED CIRCUIT TELEVISION SYSTEM
E-7

APPROVED FOR ELECTRICAL WORK ONLY


SCALE: 1" = 20'

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED-DESIGNED BY	DANIEL T. VO	REVISED BY	
St. Gobans® ELECTRICAL DESIGN	ALI BAKHDOUD	CHECKED BY	MONA ATTALLAH	DATE REVISED	

SEE SHEET E-4 FOR NOTES AND LEGENDS.

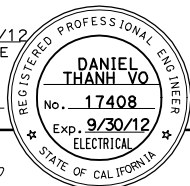



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT		SHEET No.		TOTAL SHEETS	
06	Fre							


 5/29/12
 REGISTERED ELECTRICAL ENGINEER DATE

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS
 OR AGENTS SHALL NOT BE RESPONSIBLE FOR
 THE ACCURACY OR COMPLETENESS OF SCANNED
 COPIES OF THIS PLAN SHEET.





CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

MODIFY SIGNAL AND LIGHTING
MODIFY CLOSED CIRCUIT TELEVISION SYSTEM
E-8

APPROVED FOR ELECTRICAL WORK ONLY

SCALE: 1" = 20'

